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SOUTH CAROLINA FORESTRY COMMISSION



ANNUAL REPORT 1991-1992

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STATE DOCUMENTS



S.C. Forestry Commission

Annual Report

1991-92

The Honorable Carroll A. Campbell, Governor, and to the General Assembly of
South Carolina:

Pursuant to Section 48-23-90 of the Code of Laws of South Carolina 1976, as amended, which provides that the Commission shall "inquire into and make an annual report to the General Assembly upon the forest conditions in the state, with reference to the preservation of forests, the effect of the destruction of forests upon the general welfare of the State, and other matters pertaining to the subject of forestry and tree growth, including recommendations to the public generally as to reforestation". I have the honor to submit the report of the Commission for the period of July 1, 1991 to June 30, 1992.

Respectfully submitted,

STATE COMMISSION OF FORESTRY

Boris Hurlbutt, Chairman

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STATE COMMISSION OF FORESTRY

MEMBERS OF THE COMMISSION

Boris Hurlbutt, Chairman, Walterboro

William D. Baughman, Vice Chairman, Summerville

Joel R. Thrift, Westminster

Joe P. Simpson, Lancaster

George E. Callaway, Manning

Grover F. Bowers, Jr., Estill

Charles E. Williams, Georgetown

Lawrence J. Bloomer, Easley

Dr. Max Lennon, President, Clemson University, Clemson

**Senator John Drummond, Chairman, Senate Fish, Game
and Forestry Committee**

**Rep. Thomas N. Rhoad, designee for Chairman House
Agriculture, Natural Resources & Environmental Affairs Committee**

ADMINISTRATION

Robert J. Gould, State Forester and Secretary to the Commission

J. Hugh Ryan, Deputy State Forester

Dean Carson, Technical Assistant to State Forester

Judy J. Weston, Legislative Activities Coordinator

John M. Shirer, Assistant State Forester, Engineering Division

Wray E. Freeman, Assistant State Forester, Technical Programs Division

H. Gilbert Brown, Assistant State Forester, Administration Division

Marvin W. Spearman, Assistant State Forester, Field Operations Division

ADMINISTRATION DIVISION

The Division of Administration supports the Forestry Commission's employees and programs through policies and procedures relating to budgeting, accounting, personnel services, purchasing and data processing.

PERSONNEL SECTION

The Personnel Section administers personnel management programs and policies for the Forestry Commission. Major program areas are employee relations, classification and compensation, personnel and position records management, recruitment, employee benefits, affirmative action, and worker's compensation.

Workforce

The South Carolina Forestry Commission has a total of 598.55 authorized full time equivalent positions in 70 separate job classifications. Of these positions, 577.54 are funded by state appropriations. Additionally, there were 73 temporary positions funded through the Federal Emergency Management Agency (FEMA).

Personnel Turnover

An analysis of employee turnover data reveals that 45 employees left their jobs during the fiscal year. This was a decrease of 21% over last year. There were 19 employees hired.

Employee Injuries

Most Commission personnel work in positions having a higher than normal risk of injury. The safety program, through the leadership of the Training and Safety Section, is directed toward reducing this risk. There were 49 job related injuries reported during the fiscal year, a 10.9% decrease from last year.

Overtime Claim

A back pay claim was brought by the U.S. Department of Labor for unpaid overtime on behalf of 120 current and former tower operators who resided at their job sites. A resolution of the claim was reached with the federal government in April, 1992. In May, 1992, a suit was filed in federal court by five (5) tower operators claiming that additional payment is due. Eighteen more employees subsequently joined the suit bringing the total to twenty-three (23). The suit is currently pending.

PURCHASING SECTION

The Purchasing Section administers procurement operations and policies for the Forestry Commission. Major areas and responsibilities, in addition to the supervision of all purchasing activities, include equipment specification development, formal and informal bids, contract awards and administration, central warehouse operations, insurance operations, Federal Excess Property acquisition and inventory management, Minority Business Utilization, procurement training and procurement information updates.

Procurement

Purchases and leases are contracted for in accordance with the S. C. Consolidated Procurement Code by this Section and the S. C. Materials Management Office. The Purchasing Section was responsible for the supervision of over \$5.2 million in expenditures for goods and services during the fiscal year, including the issuance of 1,461 purchase orders.

Central Warehouse Operations

Approximately 485 items, supplies and repair parts are maintained in stock to supply needs of Commission field units. A total of 1,500 issues were made in 1991-92 from the Central Warehouse. Federal excess property and supplies are also maintained and issued through the Central Warehouse.

Insurance

The Commission's fleet of 390 vehicles are insured through the Insurance Reserve Fund. Building and personal property coverage amounts to \$15,121,900.00. Property damage claims recovered amounted to \$18,685.00. Vehicle liability claims paid by the Insurance Reserve Fund amounted to \$29,283.00.

Federal Excess Property

Over \$694,000.00 in equipment and supplies were obtained this year through the U.S. Forest Service federal excess property program for use in the Commission's fire control program and by rural fire departments. The Purchasing Section administers the acquisition and disposal of this property and maintains records on the \$5 million inventory that is now on loan to the Forestry Commission.

Minority Business Utilization

The Commission encourages utilization of minority vendors for equipment, supplies and services and submits a plan yearly to the Office of Small and Minority Business. Commission purchases to small and minority businesses amounted to \$26,120.00 in the past year.

DATA PROCESSING SECTION

The Information Systems Section oversees and directs the computer resources and needs of the Forestry Commission. The computer systems system currently include a Unisys mid-range computer, approximately 70 microcomputer workstations, 10 Apple Macintosh desktop publishing systems, several Personal Computers, and the printers, scanners, modems, and other peripheral devices appropriate for these computers.

During the past year, the Information Systems Section completed system installation of networked computer systems in five District Offices which were impacted by Hurricane Hugo. This equipment allows these offices to communicate data with Columbia, and with each other by way of dedicated high speed communications links. Training on the systems has been completed in the Districts. At this time, users in the installed Districts can routinely perform inquiries on their budgets and stock inventories, and can perform data entry into the Columbia computer.

Additionally, the XE-520 computer system in the Columbia Office has been replaced with a faster, more reliable server processor. The new system, called the XE-530, is completely compatible with the existing workstations at the Columbia Office. The upgrade was necessary to handle the added burden placed on the Columbia System by the District Office computers, and to allow for future expansion. Also installed were a series of Uninterruptible Power Supplies (UPS's) for the computer room and 17 vital workstations.

The Newberry District has been outfitted with a B28 stand-alone workstation and a laser printer, which will be used by the Stewardship Forester until the District computers can be fully installed. A substantial portion of the equipment to bring Newberry on line with Columbia has been acquired through the State Surplus Property Office at very favorable prices. The remainder of the equipment will be new and has been ordered. Installation is expected to be complete by the end of fiscal year 1993. Plans are also underway to have the Spartanburg District on line before the end of the fiscal year.

A new Personal Computer-based mapping system for the Sand Hills State Forest, similar to the one at the Manchester State Forest has been installed. Efforts are underway to accomplish conversion from the current B38 system to the stand-alone PC. Printers and associated peripheral devices are currently being shared by the two systems when possible.

During the past year, a lightning strike at the Manchester State Forest office destroyed all five computers located there. Although the systems were back up and running on a limited basis the first day, the repair and replacement of the remainder of the equipment is ongoing.

Efforts are underway in Columbia to install TeleCluster, a new way of connecting the existing workstations to maximize speed and performance. Also underway is the design and implementation of an Electronic Mail network to allow users in any District location to send messages to one another or to Columbia and vice versa. When completed, this will reduce the costs of sending FAX's and letters.

**S.C. FORESTRY COMMISSION
FINANCIAL STATEMENT
FISCAL YEAR 1991-92**

REVENUES:

GENERAL FUNDS

State Appropriations	16,754,822.00
B&C Board Allocation (Budget Cut)	<u>-665,862.00</u>

TOTAL GENERAL FUNDS

\$16,088,960.00

FEDERAL FUNDS

Federal Grants	5,340,408.93
FEMA/Hugo	2,098,426.77
FEMA Flood-Storm	33,952.85
Sand Hills State Forest	<u>7,430.69</u>

TOTAL FEDERAL FUNDS

\$7,480,219.24

EARMARKED FUNDS

Sale of Junk	1,969.24
Federal Grant Subcontract	24,669.01
Misc Transfer - Other Funds	-9,584.71
Hunting & Fishing Licenses	5,996.50
Forest Products	708,856.80
Insurance Claims	1,717.49
Miscellaneous Revenue	229.60
Land Rentals	125,247.00
Equipment Rentals	257.00
Fire Equipment/Bond Fund	199,328.97
Install Purchase Note Proceed	144,750.00
Sale of Assets	27,518.85
Forest Products Assessments	<u>666,707.11</u>

TOTAL EARMARKED FUNDS

\$1,897,662.86

GRAND TOTAL REVENUES

\$25,466,842.10

EXPENDITURES:

Transferred to General Fund	1,356,309.87
Appropriation Lapse	7,875.84
State	16,081,084.16
Federal	6,526,172.28
Earmarked	<u>1,626,857.52</u>

TOTAL EXPENDITURES

\$25,598,299.67

*Expenditures exceeded revenues due to utilization of earmarked carried forward funds and federal accounts receivable.

ENGINEERING DIVISION

The Engineering Division is comprised of the Communications Section, Equipment/Central Shop Section, Training/Safety Section and Construction/Real Property Section. These sections assist in developing plans and gathering information which affect the present and future operations of the entire organization.

The Division provides support to the field and central offices through coordination of training programs and projects on both local and statewide levels. When needed, personnel from the Division provide assistance and service which ranges from labor to the technical adaptation and development of equipment and structures.

CONSTRUCTION AND REAL PROPERTY

The Construction and Real Property Section of the Engineering Division is responsible for development and implementation of both short and long range permanent improvement plans for the entire organization. More specifically the Section assists field offices and other divisions with detail planning, coordination and execution of construction, renovation and major repair projects. This assistance includes development of plans and specifications, approval by other agencies, budget management, materials purchasing and coordination of labor throughout the project.

Real property transactions and records for the purchase, transfer or sale, as well as leases and easements are coordinated by the Section.

The mail/supply room services of the central office and the headquarters complex building custodial services are coordinated by the Section.

In July 1991, an employee with skills in electrical and general maintenance work was transferred from the Insect and Disease Section to the Construction and Real Property Section. These skills have allowed the section to solve and correct many problems quickly and in a cost effective manner.

The accomplishments of the Section depend heavily on the contributions of skills and labor by field and central office personnel. The following list reflects their major achievements:

Construction

- A picnic shelter for Harbison State Forest was completed by personnel from Columbia and the districts.

- All work at Taylor Nursery Shop has been completed and the project closed. While many employees contributed to this project, the final touches were completed by Taylor Nursery personnel.

- After four (4) years of planning and discussion final plans were developed for

the Niederhof Seed Extractory Plant and a contract for construction was signed in June 1992. Construction is under way with completion expected in November 1992.

-A residence at Manchester State Forest was moved to the Forest Headquarters Complex and plans were developed for its conversion to an office. This conversion will include major renovations and additions. Projected completion of this project is January 1993. This will be a contract project.

Renovation and Repairs

-The exterior of the central headquarters building was painted by personnel from Orangeburg, Camden, Newberry and Spartanburg Districts. This project included reglazing of all windows and vinyl siding being added to the dormers on the roof.

-Personnel of the central repair shop, with help from the Construction Section, used inmate labor to build an engine rebuilding room in the shop.

-Major renovations and a face lift painting project was started at the Florence District Shop. Except for the installation of a new roof which was contracted, all work is being done by Florence District personnel.

-The seedling packing line at Coastal Nursery was moved to Tilghman Nursery and set up for operation in the 1992-93 seedling sale season. The move and setup was accomplished by Nursery Personnel with electrical assistance from the Construction Section.

-A unisex restroom was installed in Columbia Office to meet requirements of the Americans with Disabilities Act.

-The Gadson tower residence was converted to a ranger/forester office for Lexington and Calhoun Counties by Orangeburg personnel with help from the Construction Section.

-A former residence at Coastal Nursery was converted to a ranger/forester office for Dorchester County by Walterboro personnel with electrical help from the Construction Section.

Planning

-Plans were developed for a more accessible handicapped entrance to the central office and for handicapped parking spaces. Construction will be completed early in FY 92-93.

-Plans were developed for renovations in the fire control warehouse to provide a training center at the central headquarters.

-Plans were developed for renovations in the warehouse portion of the sign shop/I&D building to provide additional offices and organized storage.

Property Transactions

-Three (3) doublewide modular office units were acquired from the Department of Mental Retardation through purchase. These were moved from Mental Retardation Coastal Center at Ladson, SC to Charleston, Kingstree and Camden. The unit in Charleston has been renovated and is being used as the Charleston Ranger/Project Office. The units at Camden and Kingstree have been set up but no renovations have

been started. Decisions on these renovations will depend on future needs with regards to dispatch centers and assistance centers.

- A single-wide modular office unit was purchased for the Dire Emergency Program. This unit was set up adjacent to the I&E double-wide unit and presently serves as offices for the Engineering Division.

- Easements were granted to the S. C. Department of Highways & Public Transportation on Kings Mountain State Park.

- The title transfer for Sand Hills State Forest from the US Department of Interior to the S. C. Forestry Commission was completed.

- An Environmental Assessment was conducted to allow correction of a property line dispute at Bamberg Tower in Bamberg County.

- The title for Myrtle Beach State Park and Hunting Island State Park was transferred from the S. C. Forestry Commission to Department of Parks, Recreation and Tourism.

TRAINING AND SAFETY SECTION

The Section is responsible for establishing and implementing policy and procedures governing training and safety for the Commission. The Section coordinates training for all areas of expertise within the Agency. The Section also maintains permanent training records on all employees. In addition, the implementation of safe operating procedures, and creating a safe working environment is a responsibility of the Section. Ten Safety Committees, one in each of the Agency's separate operating units, are coordinated through the Chief of the Section.

This year saw a change in the leadership of the Section. The Chief assumed his new responsibilities January 1. It has been a time of reviewing the Commission's activities in the areas of responsibility and evaluating new and proposed needs.

The incoming Section Chief attended Safety Committee meetings in four districts, and conducted informal surveys of job performance and needs and evaluations of equipment and operation safety.

Three Policies were developed and implemented during the year. They are: Accident Review Board, Fire Protection Equipment and Motor Vehicle and Equipment Damage. The Commission joined the South Carolina Occupational and Safety Council to stay abreast of current health and safety regulations.

The Annual Training Calendar was computerized this year so that all Districts, Sections, State Forests and other units of the Commission were included in the planning process.

The Basic Fire School was held in November with a makeup in January for individuals who had to leave the class due to fire weather.

Sixty nine (69) individuals received refresher training as First Responders.

The Section participated in Overhead Training for personnel involved in fire suppression.

Defensive Driving Course Instructors were given updated training.

Two areas of the Commission doing an exceptional training effort are Law Enforcement and Equipment. The Law Enforcement Officers meet quarterly and take their expertise back to the Districts. Several courses in specialized equipment repair have been conducted by the Equipment Section.

An area of concern is training for Communications Specialists. Regular monthly meetings have been scheduled for FY 1992-93.

The computerized training records' program is being evaluated to determine how it can best meet the needs of the Agency to record personnel training status.

EQUIPMENT AND COMMUNICATIONS SECTION

The Equipment Section is responsible for development and implementation of statewide programs concerning use, design and maintenance of specialized forest fire control and forestry equipment.

The Section will also be responsible for providing technical assistance and advice to district repair shops, developing specifications for all forestry equipment and motor vehicle fleet, and arranging training for all field mechanics.

All regular and specialized fire control equipment is modified and processed for field use at the Commission's Central Repair Shop. The Central Repair Shop personnel made numerous repairs to Forestry Commission vehicles and equipment and manufactured many fire control, forest management and nursery items. The following list is some of the major accomplishments performed by the Central Repair Shop.

- Provided maintenance assistance to the district repair shops
- Processed new motor vehicle equipment
- Assisted with seedling distribution using two (2) refrigerated semi-vans
- Rebuilt tandem axle low boy trailer
- Painted twenty-nine (29) vehicles for districts, nurseries and Columbia Head quarters
- Installed water protection system of JD 750 tractors
- Refurbished five (5) fire plows
- Refurbished a JD 450 tractor

- Fabricated light bars for ranger trucks
- Painted one (1) JD450 tractor.

The Equipment Section assisted in establishing the record keeping system at all nursery and seed orchard maintenance facilities.

All District and State Forest maintenance facilities were certified by the Division of Motor Vehicle Management.

Equipment Purchased and Replaced

Purchased:

- One (1) JD 550 tractors (Manchester State Forest)
- One (1) Crosley low boy trailer (Manchester State Forest)
- Five (5) loading (drop deck) low boy trailers
- Twelve (12) JD 750 tractors

Replacement:

- One (1) three quarter ton ranger pickup (Berkeley County)
- Three (3) RM 750 fire plows (lift type)
- Two (2) wheel type Fesco fire plows
- Two (2) 1/2 ton pickup trucks (Sand Hills State Forest)

Training Arranged by Section

- 10 mechanics attended an eight day session on Specialized Electronics taught by Greenville Technical College
- 10 mechanics attended a four-day session on EFI/PFI taught by Greenville Technical College
- Operators who received new equipment attended an orientation and preventive maintenance training session

Radio Communications was moved to the Equipment Section in May 1992. The Forestry Commission's radio system includes radio units in every fire suppression unit, transport, tower and ranger truck. We have base stations in the Columbia office, district offices and two state forests. All aircraft, as well as contract aerial tankers, are radio equipped.

TECHNICAL PROGRAMS DIVISION

The Technical Programs Division provides operational and technical staff direction to the Forestry Commission field organization in each of the major program areas of forest management, nurseries and tree improvement, forest insects and diseases, forest fire protection, and information and education.

FOREST MANAGEMENT SECTION

The Forest Management Section assists South Carolina citizens with management and development of the forest resources of the state. Programs include Woodland Management Assistance, Reforestation Assistance, Forestry Services, Forest Products Utilization and Marketing Assistance, Resource Conservation and Development, and Watersheds. These programs assist owners in growing more timber, aid industries in more efficient utilization of the timber resource, and foster conservation and multiple use of the forest resource.

There are 12.2 million acres of commercial forest land in South Carolina. According to the 1986 U.S. Forest Service Survey, 68% of the land is owned by farmers and miscellaneous private owners. Forest industry owns approximately 22% with 10% in public ownership.

The Forest Management programs are designed to assist the non-industrial private landowner with multiple use management.

Forest Management Assistance

Professional foresters from the Forestry Commission provide forest management advice and assistance to landowners. The land is examined and a written forest management plan is prepared. Recommendations for management may include such silviculture practices as forest protection, reforestation, harvesting, prescribed burning, wildlife habitat improvement, and recreation. This year 4,060 management plans were prepared for 345,099 acres.

Where practical, the landowner is referred to consulting or industrial foresters to assist in carrying out the management recommendations. This year 508 cases were referred to consulting foresters and 197 cases referred to industrial foresters.

Commission foresters provide timber marking services to landowners on a limited basis. This year 51 tracts were marked, with 1,561,863 board feet of sawtimber and 5,151 cords of pulpwood designated for harvesting.

South Carolina Forest Stewardship Program

The 1990 Farm Bill authorized the U.S. Secretary of Agriculture, in consultation with the State Forester, to establish a Forest Stewardship Program to encourage the long-term stewardship of non-industrial private forest lands. This is to be

accomplished by assisting owners of such lands to more actively manage their forest and related resources by utilizing existing state, federal and private sector resource management and assistance programs. The bill also required the establishment of a State Forest Stewardship Coordinating Committee which would address forestry related issues and provide recommendations to the State Forester on the implementation of the Forest Stewardship, Stewardship Incentive and Forest Legacy programs.

The South Carolina's Forest Stewardship Coordinating Committee currently consists of representatives from the following agencies and organizations:

- | | |
|---|---|
| •S.C. Forestry Commission | •S.C. Wildlife & Marine Resources Dept. |
| •Clemson Extension Service | •USDA Soil Conservation Service |
| •USDA Forest Service | •S.C. Tree Farm Committee |
| •USDA ASCS | •S.C. Land Resources Commission |
| •S.C. Society of Consulting Foresters | •Association of Consulting Foresters |
| •S.C. Assoc. of Conservation Districts | •S.C. Forestry Association |
| •S.C. Wildlife Federation | •S.C. Nature Conservancy |
| •S.C. Chapter of the Sierra Club | •Forest Industry (Westvaco) |
| •S.C. Dept. Parks, Recreation, Tourism | •S.C. Dept. of Education |
| •S.C. Farm Bureau | •Governor's Office, Dep. Ag. Nat. Res. |
| •Palmetto Conservation Foundation | •National Audubon Society |
| •S.C. Environmental Education Association | •Private Landowners |

The South Carolina's Forest Stewardship Program has been developed to maximize the delivery of information and services to landowners, minimize duplication of effort and dilution of limited local, state and federal resources, and complement private sector services. Landowners will have stewardship (multi-resource) management plans developed for their property addressing their management objectives. These stewardship management plans will be developed cooperatively by various resource agencies and organizations — mainly the South Carolina Wildlife and Marine Resources Department, the U.S. Soil Conservation Service, Clemson Extension Service, consultants, forest industry foresters, and the South Carolina Forestry Commission.

Landowners are provided technical assistance in carrying out their stewardship management plan, access to workshops, education seminars, publications, and information on resources available from the private sector (consulting firms, industry landowner assistance programs, contractors, etc.). Through a companion program, the Stewardship Incentives Program (SIP), cost-share assistance will be available to assist in the installation of approved conservation practices.

Landowners, who are exemplary in meeting the requirements of good stewardship management on their property, will be recognized by having their property certified as a Stewardship Forest. Certification will consist of being able to display the Stewardship Forest sign on their property, a formal certificate, and a plaque recognizing them as being good stewards of the land.

As of June 30, 1992, approximately 500 requests covering over 160,000 acres have been received from landowners wanting to participate in this program. Natural resource professionals have completed 154 plans on 33,024 acres. Most of these landowners are now eligible to receive cost-share assistance under the Stewardship Incentive Program (SIP).

Forest Renewal Program (FRP)

The South Carolina Legislature, recognizing the South's unique potential to supply the nation's continuing demand for forest products, established the Forest Renewal Program (FRP) in 1981. The program provides financial cost sharing assistance to private woodland owners in reforesting cut-over and understocked forest land. With the support of forest industry, the program is jointly funded through an assessment on those industries producing primary wood products and an appropriation by the State Legislature.

This program provides up to 50% reimbursement to carry out approved forestry practices for reforestation of woodlands or forest improvement practices.

In 1982 the program was funded for the first time by a \$100,000 state appropriation. This permitted an assessment of \$400,000 from forest industry, and created a \$500,000 Forest Renewal Fund.

The program was funded at the same level for 1991-92.

Forestry Incentive Program (FIP) - Federal

Since 1974, \$17,862,944 have been allocated to South Carolina landowners under FIP.

Agricultural Conservation Program (ACP) - Federal

Agricultural Conservation Program funds are also available to landowners for reforestation.

Conservation Reserve Program (CRP)

The Conservation Reserve Program, authorized under the 1985 Farm Bill, is a voluntary program to take highly erodible cropland out of production. Participants receive annual payments for ten years and one half the initial cost to establish a conservation practice which includes trees as one option. The program began with crop year 1986 and was renewed with the passage of the 1990 Farm Bill. Eleven signups have been held with 216,807 acres approved for trees. This year 3,606 acres were planted .

FOREST MANAGEMENT ASSISTANCE 1991-92

	Non Cost Share Exams	Non Cost Share Acres	Cost Share Exams	Cost Share Acres	Stewardship Exams	Stewardship Acres	Total Woodland Examinations 1941 to June 1992
Abbeville	35	5911	33	1533	5	1143	1918
Aiken	42	5221	46	2175	1	618	3507
Allendale	16	946	64	3667	10	4279	1158
Anderson	26	1621	14	1018	3	214	3408
Bamberg	2	102	42	2228	2	505	1801
Barnwell	19	2714	59	4161	5	986	1737
Beaufort	5	430	4	391	0	0	532
Berkeley	27	2099	82	7016	4	783	1133
Calhoun	11	2802	69	3748	2	107	2325
Chars/Lower	19	1074	15	2581	2	759	
Chars/Upper	11	3728	34	3177	1	84	761
Cherokee	22	1974	11	963	2	163	1447
Chester	14	1115	42	2084	0	0	1677
Chesterfield	17	2755	67	2950	2	938	3484
Clarendon	50	15681	253	16197	6	1053	2229
Colleton	15	1996	50	3358	3	483	2887
Darlington	24	1065	50	1993	2	129	2304
Dillon	14	970	27	811	0	0	1760
Dorchester	23	5483	32	2205	3	919	1229
Edgefield	31	3998	29	1260	16	2675	1253
Fairfield	8	699	72	4625	0	0	2112
Florence	37	5342	68	2407	1	679	3508
Georgetown	5	664	27	1844	0	0	825
Greenville	62	2807	6	205	1	57	2117
Greenwood	44	4491	43	2216	9	1509	2313
Hampton	28	1714	54	3323	0	0	2241
Horry	46	3732	46	2385	1	36	2840
Jasper	5	512	12	760	0	0	786
Kershaw	27	3541	114	7285	4	2931	2606
Lancaster	20	3043	77	3512	1	149	2464
Laurens	36	3231	24	1038	7	1141	2205
Lee	34	6034	109	8057	1	890	1665
Lexington	22	2859	25	882	12	1524	2571
Marion	16	871	37	1633	2	241	987
Marlboro	30	2476	17	1007	2	273	1518
McCormick	15	1327	13	786	4	543	1581
Newberry	44	4781	74	2320	10	1411	2773
Oconee	91	5141	0	0	1	67	2522
Orangeburg	34	4744	212	11836	4	1413	5024
Pickens	44	1948	10	302	3	193	2143
Richland	26	4935	36	1617	2	452	3122
Saluda	20	2376	68	1901	6	710	1980
Spartanburg	15	408	10	414	1	350	1968
Sumter	109	17442	223	16637	0	0	2591
Union	14	1425	14	585	5	617	1033
Williamsburg	30	5123	128	12058	5	1168	3246
York	73	5373	6	200	3	832	2890
State Total	1,358	158,774	2,548	153,351	154	33,024	98,227

Hurricane Hugo Reforestation Project

Woodland examinations offered to non-industrial private forest landowners under the GIMME GREEN program have been completed. Approximately 1,000 owners participated in this program. Approximately 235,000 acres were examined by Commission foresters and contracting consulting foresters. Twenty-three firms under contract with the SCFC examined approximately 195,000 acres of the total and earned \$209,000 to perform this work. Funding for this and other technical assistance to forest landowners was provided by the Dire Emergency Supplemental Appropriations Act through the efforts of the S.C. Congressional Delegation.

The Hugo Incentive Program (HIP) was established and funded with \$6.0 million federal dollars (\$3.0 million initial funding plus \$3.0 million more in Spring 1992. HIP is unique in that federal monies are being administered and allocated by a state agency. Further, the SCFC is using the Dire Emergency Supplemental Appropriations Act funding to operate the cost share program. Therefore, all of the \$6.0 million is available to assist non-industrial private forest landowners. The entire \$6.0 million is now spent or designated for applicants.

1991-92					
STATEWIDE ACCOMPLISHMENTS ALL COST SHARE PROGRAMS					
Program	No. of Landowners	Acres Planted	Natural Regeneration	TSI Acres	Cost Share Payments
FRP	106	5,245	100	559	\$515,736
FIP	402	14,399	0	1,439	1,169,402
ACP	532	10,884	27	2,404	718,557
CRP	154	3,606	0	334	107,891
HIP	206	7,004	143	1,106	969,438
TOTAL	1,400	41,138	270	5,842	\$3,481,024

Seedling Survival

Ample rainfall for the spring and early summer of 1991 was the most important factor relating to the 6% increase in survival statewide. A total of 378 survival checks were made using a row count or tenth acre plot method for determining survival. Geographically, the northeastern section of the state exhibited the most serious drought conditions, resulting in the lowest survival. A weighted analysis involving all survival checks was used to determine the statewide survival of 81%.

PLANTING SITES CHECKED BY PERCENT SURVIVAL (WEIGHTED)					
DISTRICT	0-49%	50-70%	71-100%	Total Plantings Inspected	Weighted % Survival
CAMDEN	3	6	40	49	83
FLORENCE	6	14	37	57	75
KINGSTREE	0	2	23	25	92
NEWBERRY	2	14	72	88	81
ORANGEBURG	2	8	46	56	79
SPARTANBURG	4	10	44	58	78
WALTERBORO	1	6	38	45	84
	18	60	300	378	81

Forest Services

Through this program the Commission provides landowners forestry services to assist in afforestation, reforestation, and to maximize production from their woodlands. For these services the landowner is charged the cost of all services performed.

These services were available to landowners during the year:

- Firebreak Plowing—performed by Forestry Commission employees using agency equipment for \$35 per hour.
- Prescribed Burning—performed by Forestry Commission employees using agency equipment for \$4 per acre for understory and \$6 per acre for site preparation - minimum fee of \$50.00. (No new applications taken due to budget cuts).
- Prescribed Burning Standby—an agency tractor and employee on standby at burning site while landowner performs burning under an approved plan for \$10 per hour - minimum fee of \$50.00.
- Equipment Rental Program—agency owned tree planters, bedding plows and drum choppers made available to private landowners at rates from \$3 to \$15 per acre.
- Timber Marking—performed by Forestry Commission employees at the rate of \$3 per thousand board feet and \$1 per cord.

FOREST SERVICES ACCOMPLISHMENTS			
SERVICE	# Tracts	Units of Measure	Receipts
Firebreak Plowing	684	1,437. miles	\$64,427.75
Prescribed Burning	58	3,161. acres	\$14,991.20
Prescribed Burning			
Standby	57	3,380 . acres	\$5,660.50
Equipment Rental	45	1,099 . acres	\$7,443.40
Water Bar Construction	24	1,097 . bars	\$12,281.50
Timber Marking	51	1,561,863 . BF	\$4,685.59
		5,151 . cords	\$5,151.00
Total Dollars			\$114,640.94

Economic Development: Forest Products

A successful conclusion was reached with the oil overcharge grant funds from the Governor's office as applied to an incentive payment program for Hurricane Hugo-damaged timber for fuel chips. Over \$189,000 was disbursed through a Commission conceived and administered program which caused more than 93,000 tons of fuel chips to be harvested over 2,442 acres. This program involved 64 different landowners in 8 Hugo counties. In addition to steam or electricity generated from fuel chips, an even greater advantage is the site preparation cost saving resulting from utilizing this material. Site preparation savings to landowners is estimated to be more than \$800,000.

Two forest product recruitment and information gathering trips were completed during the year. One week spent cooperatively with Palmetto Economic Development Corporation, the State Development Board and the Forestry Commission in the greater Los Angeles, California area was beneficial. Eleven appointments made in advance with top executives of furniture and forest product related manufacturers provided much information and two leads. While Development Board personnel contacts covered all manufacturing, the Forestry Commission focused only on forest products. The difficult environmental and operating cost problems in Los Angeles translate into opportunities for South Carolina. California (primarily L.A.) has the largest number of furniture manufacturers in the U.S. outside of North Carolina.

A second trip was made to St. Louis where three appointments were made as an adjunct to a U.S.F.S. meeting attended. One contact in St. Louis has development possibilities for our State.

Additionally, information was provided for a number of export requests, all interested in either southern pine or quality hardwoods. These clients come from Italy, the Netherlands, Switzerland, and Japan.

It is very encouraging to see a strong interest developing in southern pine lumber for millwork. Requirements for this product are considerably different than dimension grades and several South Carolina companies are serving this expanding market niche, partly driven by western lumber source problems.

Best Management Practices (BMP's) Monitoring Program

SCFC foresters inspected 177 logging operations for BMP compliance. BMP compliance was excellent on 54 sites, adequate on 96 sites, and inadequate on 27 sites. Overall, 84.7% of the logging jobs had acceptable compliance with BMP's.

Inadequate sites generally reflected the lack of protection for streams and the occurrence of logging when soils were too wet to support equipment.

The effectiveness of BMP's in protecting water quality was measured on 27 sites which had streams associated with harvesting. BMP effectiveness was determined by a three-pronged approach: the forester's compliance check, a stream habitat assessment, and a stream insect bioassessment. All three techniques demonstrated that water quality was protected when BMP's were employed.

Resource Conservation and Development Project: Ninety Six District

The Ninety Six District Resource Conservation and Development Project (RC&D) contains six counties in the S.C. Forestry Commission's Newberry District. These are Abbeville, Edgefield, Greenwood, Laurens, McCormick, and Saluda Counties. The RC&D Committee was initiated and sponsored by private citizens, city and county governments, and Soil and Water Conservation Districts from the six counties. Federal, state and local governments, industry representatives, and others work together on projects that the local citizens consider necessary to develop a better way of life for the people in the project area. These projects are accomplished by developing and conserving the human and natural resources of the area.

The RC&D Forestry Committee's objective is to promote optimum utilization and conservation of the forest resources for the economic well being of the area. Three goals identified by the Forestry Committee are: 1) increase economic development and employment by using forest resources in traditional and non-traditional ways; 2) increase productivity of forestland through improved forest management techniques; and 3) improve protection of the land and water resources by increasing public awareness of conservation issues.

Fiscal year 1991-92 proved to be another active period for the Ninety Six District RC&D Project. Some of the major accomplishments and activities for the year are outlined as follows:

Dry Hydrant Project
Annual Woodland Clinic
Alternative Forest Product Development Project
Integrated Management for Multiple Use
Urban Forestry Support
Promote Best Management Practices on Forestlands
Promote Environmental Education

Resource Conservation and Development Project: Crossroads of History

The Crossroads of History Resource Conservation and Development Project consists of Cherokee, Chester, Fairfield, Lexington, Newberry, Richland, Union and York Counties.

The Project does not fund a forester position, however, forestry assistance to the project is provided by foresters from the Newberry District.

Special Water Quality and Hydrologic Unit Projects.

The Forestry Commission, in cooperation with Clemson Extension, Soil Conservation Service, Agricultural Conservation and Stabilization Service, South Carolina Department of Health and Environmental Control and South Carolina Land Resources Commission, assists landowners in maintaining high levels of water quality in critical areas throughout the state. The Forestry Commission currently offers technical assistance in reforestation of cutover timber lands, waterbar construction on logging roads and location and design of logging roads and decks.

During the fiscal year, the Commission provided technical assistance on the following projects:

- 1) Lake Bowen Water Quality Project
- 2) Bush River/Camping Creek Water Quality Project
- 3) Little Saluda/Clouds Creek Water Quality Project

NURSERIES SECTION

The Forestry Commission operated three forest tree nurseries for the production of seedlings for South Carolina landowners.

This year 32,689,226 seedlings were grown and 31,983,779 were shipped. South Carolina's forest industries planted an additional 33,213,226 seedlings on company lands. A grand total of 94,710,582 seedlings were planted on 140,311 acres in the state during the year.

As a result of a decrease in the production of forest tree seedlings, Piedmont Nursery will no longer produce loblolly forest tree seedlings. The Piedmont facility will continue to grow the Forestry Commission's hardwood seedlings and will develop white pine, Virginia pine and oak seed orchards. This facility will continue to be used for seedling distribution.

Research

The Forestry Commission continues cooperative research projects with Clemson University, Auburn University and the U. S. Forest Service. The Commission also maintains membership in the North Carolina State University Pine Tree Improvement Cooperative, the N. C. State Hardwood Research Cooperative, and the Auburn University Southern Forest Nursery Management Cooperative.

Containerized Seedlings

Specialized needs exist for seedlings other than bareroot stock grown at Forestry Commission nurseries. To meet these needs, a triple bay greenhouse is maintained at Creech Seed Orchard, Wedgefield. Containerized seedlings, rooted cuttings and progeny test materials are grown at the greenhouse. The greenhouse and associated slathouses give the Commission the capacity to grow a million plus containerized seedlings annually.

Forest Tree Seed Collection Program

Each year the Forestry Commission collects or purchases pine cones and other forest tree seed for seedling production. During the past year, walnut, baldcypress, redcedar, yellow poplar, ash, maple, longleaf pine, white pine, and white, red, willow and swamp chestnut oak seed were purchased.

STATE NURSERIES SEEDLING PRODUCTION BY SPECIES

BAREROOT SEEDLINGS

Improved Coastal Loblolly Pine	11,517,000
Improved Piedmont Loblolly Pine	13,264,000
Texas Loblolly	750,000
Longleaf Pine	4,216,000
Improved Slash Pine	25,000
Improved Virginia Pine	300,000
Improved White Pine (2-0)	542,000
Table Mountain Pine	0
Sand Pine	35,000
Shortleaf Pine	105,000
Baldcypress	75,000
Redcedar	292,895
Yellow Poplar	68,000
Improved Sycamore	60,000
Sweetgum	33,000
Black Walnut	25,500
Crape Myrtle	1,000
Dogwood	13,500
Redbud	500
Bicolor Lespedeza	1,000,000
Sawtooth Oak	7,000
Miscellaneous	10,413
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Total	32,317,688

White Pine (1-0) Not For Sale	360,000
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CONTAINERIZED SEEDLING

(CREECH SEED ORCHARD)

Improved Piedmont Loblolly Pine	12,250
Improved Coastal Loblolly Pine	13,330
Improved Virginia Pine	9,480
Improved Longleaf Pine	256,000
Sawtooth Oak	8,230
Leyland Cypress	37,125
Carolina Sapphire	7,333
Clemson Greenspire	5,670
Deodar Cedar	2,120
Progeny Test Seedlings	20,000
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Total	371,538

Grand Total	32,689,226
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TREE SEEDLING DISTRIBUTION BY LANDOWNER CLASSIFICATION

A. Seedlings Planted in the State by Land Ownership:

Land Ownership	Percent of Total	Number Trees Planted
Private Ownership	40	32,673,300
Christmas Tree Growers	1	274,788
Forest Industry (Pulp & Paper)	50	33,213,226
Lumber		9,133,580
Forest Industry (Other Corp)	3	15,283,006
Schools		48,235
State Forest		352,000
Other State Land		607,170
Other Government Land		291,240
Federal Land	6	2,807,400
Associations/Clubs		26,637
Total	100	94,710,582

B. Source of Seedlings Planted in the State

1.Nurseries in South Carolina	
S. C. Forestry Commission (Includes Greenhouse)	28,982,413
Champion International	2,381,300
International Paper Company	22,245,869
Westvaco	18,846,000
Weyerhaeuser	15,000,000
Total	87,455,582
2.Nurseries Outside South Carolina	
Florida Division of Forestry	800,000
Georgia Forestry Commission	400,000
Bowater	2,040,000
Federal Paper Board	219,000
Union Camp	791,000
US Forest Service	1,495,000
Georgia Pacific	10,000
International Forest Tree Seed Company	1,500,000
Total	7,255,000

C. State Nursery Seedlings Shipped

Out-of-State	3,024,486
In-State	28,982,413

Forest Tree Seedlings Sales - Distribution by Species / County

June 30, 1992

COUNTY	IMPROVED COASTAL LOBLOLLY PINE	IMPROVED PIEDMONT LOBLOLLY PINE	IMPROVED SLASH PINE	LONGLEAF PINE	SWEETGUM	SAWTOOTH OAK	YELLOW POPLAR	BALD- CYPRESS
ABBEVILLE	0	746,000	0	0	0	0	0	1,500
AIKEN	7,709,499	486,045	0	458,000	0	930	0	1,000
ALLENDALE	2,432,224	151,000	0	75,000	0	180	0	500
ANDERSON	0	434,000	0	500	0	200	0	500
BAMBERG	1,432,102	218,000	0	13,375	0	120	0	0
BARNWELL	2,304,499	167,000	0	220,000	500	340	500	0
BEAUFORT	66,000	10,000	1,000	1,500	0	170	0	0
BERKELEY	3,576,000	37,000	0	887,090	0	330	0	1,000
CALHOUN	383,500	88,500	0	29,635	0	590	0	0
CHARLESTON	881,782	6,000	0	355,175	500	570	1,000	1,500
CHEROKEE	0	654,025	0	0	0	140	1,000	0
CHESTER	42,000	320,000	0	0	0	0	0	500
CHESTERFIELD	92,000	1,070,225	0	386,000	0	320	1,000	0
CLARENDON	1,040,000	0	0	12,000	0	50	0	0
COLLETON	1,786,418	500	0	55,500	0	90	0	0
DARLINGTON	192,500	26,500	500	99,900	0	440	0	0
DILLON	516,090	0	0	1,090	0	250	0	5,000
DORCHESTER	2,665,212	500	0	39,045	0	0	500	10,000
EDGEFIELD	500	502,000	0	500	0	120	0	0
FAIRFIELD	2,000	929,000	2,000	1,315	0	660	0	0
FLORENCE	600,770	500	0	13,000	500	90	2,000	1,000
GEORGETOWN	4,843,716	0	1,000	0	5,000	80	5,000	5,000
GREENVILLE	1,000	488,500	0	2,000	500	340	2,500	500
GREENWOOD	101,000	1,341,000	0	0	0	150	0	0
HAMPTON	3,141,800	0	2,000	9,000	0	610	0	1,000
HORRY	708,500	0	0	12,000	500	170	1,000	500
JASPER	1,221,870	15,000	14,000	1,000	1,000	50	0	0
KERSHAW	689,000	987,500	0	244,545	0	350	1,000	2,000
LANCASTER	0	3,027,450	0	30,090	0	430	620	0
LAURENS	58,000	1,900,000	0	0	0	270	500	0
LEE	110,500	599,500	0	46,500	0	80	0	0
LEXINGTON	546,040	164,045	0	214,339	50	800	3,050	1,500
MARION	1,022,500	0	0	0	0	100	0	500
MARLBORO	521,000	30,000	0	307,970	2,000	0	500	0
MCCORMICK	0	678,725	0	0	0	290	0	0
NEWBERRY	13,000	2,105,000	0	0	2,000	600	500	0
OCONEE	0	463,500	0	545	0	190	2,000	2,000
ORANGEBURG	3,068,155	45,140	0	279,495	0	950	0	4,500
PICKENS	0	283,545	0	500	500	360	3,000	1,500
RICHLAND	216,500	20,545	0	1,100	0	365	3,800	3,000
SALUDA	27,000	867,500	0	5,500	0	170	0	0
SPARTANBURG	1,000	420,000	500	545	2,000	950	1,000	500
SUMTER	501,810	10,835	500	89,245	500	1,420	2,000	4,500
UNION	0	505,500	0	0	0	320	0	0
WILLIAMSBURG	4,750,500	0	0	102,920	0	90	1,000	2,500
YORK	0	963,000	0	500	0	250	1,000	500
MULTIPLE CO	18,295,365	2,444,000	500	686,500	13,000	120	22,150	3,700
OUT-OF-STATE	2,121,000	659,000	0	12,000	0	0	5,000	0
UNKNOWN	138,500	40,000	0	0	0	0	0	0
TOTAL	67,820,852	23,906,080	22,000	4,694,919	28,550	15,095	61,620	56,200

Forest Tree Seedlings Sales - Distribution by Species / County

continued

BLACK WALNUT	SYCAMORE	IMPROVED WHITE PINE	DEODAR	IMPROVED VIRGINIA PINE	EASTERN REDCEDAR	SAPPHIRE	GREEN- SPIRE	LEYLAND CYPRESS	MISC. SPECIES	TOTAL
0	0	500	0	1,500	3,000	0	0	144	0	752,644
500	1,000	10,500	640	22,120	18,500	90	144	1,134	0	8,710,102
0	0	0	0	0	500	0	0	342	0	2,659,746
0	500	5,750	0	8,540	8,500	342	162	2,790	0	461,784
500	0	1,500	0	2,500	2,500	36	36	252	0	1,670,921
0	0	2,000	0	0	3,500	0	0	0	0	2,698,339
0	0	500	0	3,480	5,000	144	90	1,476	0	89,360
500	0	1,000	0	8,120	4,000	126	108	378	0	4,515,652
0	0	1,000	0	2,540	4,500	36	36	108	0	510,445
0	1,500	500	40	9,600	8,000	234	558	1,134	0	1,268,093
0	0	500	0	1,540	500	0	0	432	100	658,237
0	500	500	0	1,540	0	0	0	180	0	365,220
0	0	3,500	0	10,520	4,500	232	144	972	0	1,569,413
0	0	0	0	500	2,000	0	0	72	100	1,054,722
500	500	1,500	0	2,360	8,000	90	36	360	0	1,855,854
0	500	1,000	0	2,320	5,500	378	36	864	0	330,438
1,000	500	500	0	3,160	5,000	0	0	252	0	532,842
0	0	0	0	21,980	3,500	774	558	1,854	0	2,743,923
500	0	0	0	2,540	1,500	828	720	828	0	510,036
0	0	0	0	0	1,500	18	18	126	0	936,637
500	1,000	1,500	0	1,900	5,500	72	54	378	0	628,764
0	5,000	2,000	0	8,500	3,000	180	0	198	0	4,878,674
1,500	500	15,700	200	8,000	10,500	324	198	1,476	750	534,488
0	0	1,500	40	3,100	1,500	90	72	450	0	1,448,902
0	0	500	0	500	2,500	0	0	54	0	3,157,964
0	1,000	1,500	0	4,000	11,250	0	0	216	0	740,636
500	0	500	0	12,000	1,000	0	0	198	0	1,267,118
500	500	3,000	40	3,660	9,500	72	0	666	0	1,942,333
0	0	4,500	120	5,500	625	18	18	576	10	3,069,957
4,000	1,500	6,500	0	4,500	2,500	0	0	1,170	0	1,978,940
0	0	1,000	80	2,860	1,500	36	18	666	0	762,740
0	550	6,600	120	23,340	25,600	720	108	4,068	0	990,930
500	0	2,000	0	2,500	5,000	0	0	0	0	1,033,100
500	0	500	0	0	2,000	0	0	180	0	864,650
0	0	0	0	0	500	0	0	0	0	679,515
0	500	700	80	1,500	0	54	0	738	0	2,124,672
1,500	1,000	80,500	40	2,500	8,300	414	342	1,044	0	563,875
3,000	0	7,000	80	8,080	15,000	108	126	954	0	3,432,588
2,500	1,000	12,000	40	5,500	7,500	504	630	1,944	0	321,023
1,100	50	3,500	400	5,060	10,950	396	252	3,429	100	270,547
0	0	500	800	3,120	2,000	234	180	324	0	907,328
1,500	1,500	17,700	40	5,400	9,000	90	180	1,566	25	463,496
1,000	1,000	6,500	80	7,940	2,500	108	90	558	0	630,586
0	0	500	0	500	3,000	0	0	180	0	510,000
0	0	0	0	1,400	8,500	198	180	918	0	4,868,206
500	500	7,000	0	12,080	6,500	234	378	2,610	0	995,052
3,025	4,540	57,950	0	12,200	23,500	36	198	306	4,000	21,571,090
0	0	141,500	0	85,000	500	180	0	306	0	3,024,486
0	0	0	0	500	0	0	0	0	0	179,000
25,625	25,140	413,400	2,840	336,000	269,725	7,396	5,670	38,871	5,085	97,710,582

**Total Seedlings and Acres Planted in South Carolina
1929-1992, By County**

COUNTY	SEEDLINGS PLANTED 1991-92	GRAND TOTAL PLANTED TODATE 1929-92	ACRES PLANTED 1929 TO 6/30/92
ABBEVILLE	752644	58696611	72105
AIKEN	8710102	210722670	256348
ALLENDALE	2659146	87163944	109871
ANDERSON	461784	49229287	57403
BAMBERG	1670921	57066046	73219
BARNWELL	2698339	16901623	148704
BEAUFORT	89360	267157346	33498
BERKELEY	4515652	113335186	140190
CALHOUN	510445	46301157	60509
CHARLESTON	1268093	42640917	55563
CHEROKEE	658237	32220712	38762
CHESTER	365220	77762008	119089
CHESTERFIELD	1569413	138730996	163999
CLARENDON	1054722	60227669	73153
COLLETON	1855854	123352970	167394
DARLINGTON	330438	34808049	43369
DILLON	532842	27382752	31335
DORCHESTER	2743923	77575338	92559
EDGEFIELD	510036	66679895	88785
FAIRFIELD	936637	102605686	125792
FLORENCE	628764	32258426	39315
GEORGETOWN	4878674	129799076	159411
GREENVILLE	534488	28507845	32947
GREENWOOD	1448902	79972699	87874
HAMPTON	3157964	98693281	123817
HORRY	740636	72950146	83362
JASPER	1267118	91941405	106417
KERSHAW	1942333	179673688	209422
LANCASTER	3069957	73896751	92765
LAURENS	1978940	94680202	179612
LEE	762740	34276602	43208
LEXINGTON	990930	61276120	75646
MARION	1033100	33575322	41211
MARLBORO	864650	51904301	63575
MCCORMICK	679515	46989642	62074
NEWBERRY	2124672	83044696	108155
OCONEE	563875	33967301	39906
ORANGEBURG	3432588	129701773	192150
PICKENS	321023	27474100	32012
RICHLAND	270547	27744649	78439
SALUDA	907328	46058295	64200
SPARTANBURG	463496	57033237	66263
SUMTER	630586	64007337	73686
UNION	510000	70060485	88356
WILLIAMSBURG	4868206	94139089	126363
YORK	995052	57782340	68783
MULTIPLE COUNTIES	21750090	56614286	103130
TOTAL	94,710,582	3,586,939,278	4,356,975

SEEDLING DISTRIBUTION 1927-1992

YEAR	TOTAL STATE NURSERIES	TOTAL ALL SOURCES	YEAR	TOTAL STATE NURSERIES	TOTAL ALL SOURCES
1928-29	142000	142000	1960-61	145609075	158330575
1929-30	148000	148000	1961-62	71892420	83844470
1930-31	986000	986000	1962-63	56191241	64201541
1931-32	976000	976000	1963-64	51445597	62423597
1932-33	996000	996000	1964-65	49009893	60683493
1933-34	1031000	1031000	1965-66	42310685	56529185
1934-35	7529000	7529000	1966-67	48575190	69597590
1935-36	23000000	23000000	1967-68	39970136	58812136
1936-37	22000000	22000000	1968-69	29529285	51453285
1937-38	11192000	11192000	1969-70	31415430	49202630
1938-39	10854000	10854000	1970-71	31939880	54540880
1939-40	12244000	12244000	1971-72	23677925	41357225
1940-41	21165423	21165423	1972-73	30977800	45239100
1941-42	10275037	10275037	1973-74	28443000	42305500
1942-43	4742010	4742010	1974-75	40081500	55996500
1943-44	5662608	5662608	1975-76	40664387	59063387
1944-45	1962600	1962600	1976-77	39795375	59238275
1945-46	6402255	6402255	1977-78	45734500	64380200
1946-47	1962600	1962600	1978-79	43009533	65936933
1947-48	11356990	11356990	1979-80	46374919	76206619
1948-49	30338775	30338775	1980-81	53512622	86419513
1949-50	29501955	29501955	1981-82	55727828	87793028
1950-51	20615315	20615315	1982-83	47798858	86265299
1951-52	16619000	19619000	1983-84	50169612	100394312
1952-53	22035850	32246298	1984-85	51635770	107717581
1953-54	36210100	42852314	1985-86	65464810	124381360
1954-55	35373025	45182255	1986-87	73554964	157522970
1955-56	34413550	42931755	1987-88	78787967	164094827
1956-57	55753600	69658736	1988-89	55051595	153450416
1957-58	60846200	93369084	1989-90	38355557	128475489
1958-59	123985000	166351000	1990-91	29297000	102384439
1959-60	147146365	187516418	1991-92	31,983,779	94,710,582

TOTAL STATE NURSERIES _____ 2,335,454,391

TOTAL ALL SOURCES _____ 3,607,763,365

SEED ORCHARDS

	ACRES
CREECH SEED ORCHARD	
COASTAL LOBLOLLY (DISEASE RESISTANT)	5
PIEDMONT LOBLOLLY (1ST GENERATION)	40
PIEDMONT LOBLOLLY (DISEASE RESISTANT)	5
SC SLASH (1ST GENERATION)	17
LONGLEAF (1ST GENERATION)	12
VIRGINIA PINE (1ST GENERATION)	1
COASTAL LOBLOLLY (2ND GENERATION)	10.2
PIEDMONT LOBLOLLY (2ND GENERATION)	13.4
VIRGINIA PINE (1st GENERATION)	3
TOTAL	106.6
GREEN SAVANNAH SEED ORCHARD *	
COASTAL LOBLOLLY (1.5 GENERATION)	39
TOTAL	39
NIEDERHOF SEED ORCHARD	
COASTAL LOBLOLLY (2ND GENERATION)	204
PIEDMONT LOBLOLLY (2ND GENERATION)	118
LONGLEAF PINE (1st GENERATION)	30
SC SLASH (1st GENERATION)	3
SAWTOOTH OAK (SEED PRODUCTION)	2
TOTAL	357
COASTAL SEED ORCHARD	
SYCAMORE (SEED PRODUCTION/GENETIC ARCHIVE)	4
SWEETGUM (SEED PRODUCTION/GENETIC ARCHIVE)	6
TOTAL	10
PIEDMONT SEED ORCHARD	
WHITE PINE (1.5 GENERATION)	12
VIRGINIA PINE (1st GENERATION)	3
TOTAL	15

GRAND TOTAL ORCHARD/SEED PRODUCTION 527.6

*NO LONGER OPERATIONAL

Additional longleaf, swamp chestnut oak, willow oak, white oak, northern red oak, southern red oak, red maple and green ash seed production areas are being developed at the above facilities.

Overview

Since 1963 the S. C. Forestry Commission has been a participating member in the N.C. State University Industry Cooperative Tree Improvement Program. Understanding that trees could be genetically improved, substantial gains have been and will be possible. Success over time has and will result in firm commitments to tree improvement programs. As tree improvement programs continue, new and greater challenges in accomplishing breeding and operational goals will become evident.

Niederhof Seed Orchard

Opening Niederhof Seed Orchard to controlled hunting continues the Forestry Commission's concept of multiple use management of state owned lands. Hunting rules, regulations and guidelines have been adopted and are being administered by the Forestry Commission.

The following schedule relates to all wildlife activities.

Species	Season	Hunt Days	Hours	Restrictions	Fees
Deer	18-Aug. 29-Dec.	Saturday	Dawn-9AM 3PM-Sunset	Still-Hunt	\$20.00
Quail	1-Jan. 26-Feb.	Tues/Thur	Dawn Sunset	Max 3 hunters Per Party	\$10.00
Turkey	16-Mar 27-Apr	Tues/Thur	Dawn Sunset	Stalking	\$10.00

PERMITS ISSUED AND REVENUE RECEIVED

	Number of Participants	Number of Use Days	Number Harvest	Revenue
Deer	56	8	34	\$960
Quail	6	3	5	\$60
Turkey	31	14	6	\$310
Totals	133	25	45	\$1,330

(includes gratis permits issued)

Cropland at Niederhof not immediately needed for orchard expansion is utilized as set aside land with allotment payments through the ASCS. Fiscal year payment amounted to \$6,279.00. Jasper County receives 25% of other revenue generated at this facility.

INSECT AND DISEASE SECTION

The Insect and Disease Section in cooperation with the State Division of Plant Industry and the U.S. Forest Service maintains a program to detect, evaluate, and suppress forest pests. Through cooperative agreements, these agencies make their technical assistance and advice available to the Forestry Commission.

The current forest pest detection and reporting system involves the reporting by field foresters of forest pests that are causing abnormal losses, require control action, or which may present new problems. Aerial surveys are made periodically for specific pests to determine occurrence and the need for suppression action.

Major Insect Problems

Southern Pine Beetle:

An infestation of southern pine beetle which began in the spring of 1991 caused moderate losses through the fall of 1991 and then partially subsided until mid summer of 1992. Aerial surveys in 1991 and 1992 detected 1,719 beetle spot infestations. These spots contained 191,496 trees with a volume of 8,615 cords and 12,718,008 board feet of pine timber. This timber had a green stumpage value of \$2,037,003. The majority of this loss was in the central piedmont although some losses were recorded in the coastal plains.

In late June of 1992 a major outbreak began in the central piedmont of S.C. Aerial surveys are now in progress to delineate beetle activity in the following counties: Fairfield, Chester, Lancaster, Kershaw, York, Cherokee, Union, Newberry, Laurens, Dorchester, Charleston, Beaufort, Jasper and Colleton.

Major Disease Problems

Oak Wilt:

Oak wilt disease has been identified in Chesterfield, Kershaw, Lancaster, Lee, and Richland counties. It appears to be static and causing losses only to low value oaks. Since there is potential for loss of valuable trees, including urban trees, periodic surveys are made to evaluate the spread.

Dutch Elm Disease:

Dutch Elm disease has been confirmed in Aiken, Anderson, Cherokee, Chester, Chesterfield, Edgefield, Fairfield, Greenville, Greenwood, Kershaw, Lancaster, Laurens, Lexington, Marlboro, Newberry, Oconee, Pickens, Richland, Saluda,

Spartanburg, and York counties. It is expected to gradually spread through the state because the primary agent of spread, the smaller European elm bark beetle, occurs statewide.

Mycorrhizal Inoculations:

A project was continued at Creech Seed Orchard this year to inoculate containerized longleaf seedlings with the mycorrhizal fungus Pisolithus tinctorius (P.t.). 350,000 longleaf seedlings were inoculated with mycorrhizae.

Dogwood Anthracnose:

In 1988 a new anthracnose disease of dogwood was noted for the first time in South Carolina. This disease is caused by the fungus Discula destructiva. Symptoms include foliage blighting, canker formation and progressive deterioration. Infected trees usually are killed by the fungus in 2-3 years. At this time infected trees have been found in Anderson, Greenville, Laurens, Oconee, Pickens, and Spartanburg counties. As part of a southwide effort, the Forestry Commission has established 19 permanent plots in the counties known to harbor infections of the fungus. The dogwoods in those plots will be monitored annually to determine the rate of spread of this potentially devastating disease. Third year USFS funding was recently approved for this project.

Forest Health:

The Forest Health Program is a new state/federal cooperative program designed to monitor long-term forest losses caused by insects, disease and other factors. The U.S. Forest Service and the EPA are the lead federal agencies in this program. The program uses loss data that is already collected, such as southern pine beetle loss assessments. Additionally, randomly selected plots are established in the forest for detailed monitoring.

The SCFC agreed to cooperate in a demonstration project to evaluate loblolly and shortleaf pine. This year I & D personnel examined fifty-eight of the plots in South Carolina. If the timber type fit the criterion for plots in the demonstration area, they were established as permanent monitoring plots. This consisted of locating the plot center on the ground and marking and mapping an access for monitoring crews. Landowner permission to use the plots was also obtained. Twenty-two of the plots checked were of the loblolly/shortleaf pine type needed in this study. Landowner permission was obtained for 18 of these plots. Federal contract crews will monitor these plots this summer and annually for four years.

Integrated Pest Management:

The Forestry Commission, Clemson University, and the U.S. Forest Service began an integrated pest management demonstration project in South Carolina in 1982. During the first phase of this project, the Commission acquired a portable sawmill. The mill is being used to demonstrate the feasibility of salvaging timber damaged by Hugo into lumber on the site. During Fiscal Year 91-92 the mill was leased by 19 landowners and used to cut approximately 19,432 board feet of pine timber. The mill was also used at several SCFC locations to process timber from state lands. The majority of this timber was salvaged from the Hugo damage. At the end of Fiscal Year 1992 this project was declared over and the mill was transferred to Manchester State Forest.

Miscellaneous Insect and Disease Checks:

Commission foresters made approximately 577 field checks of insect and disease problems and made recommendations for prevention and control. Other inquiries were handled by telephone, mail, and personal contact.

Insect and Disease Laboratory:

During Fiscal Year 91-92 the Insect and Disease Laboratory processed 105 samples. These were submitted for analysis by Commission employees and private individuals. Recommendations for control of various pests identified were given where needed. The lab is now equipped with 100% state property and gives the capability to analyze any forest insect or disease problems as well as problems caused by nematodes and other major loss agents.

FOREST FIRE PROTECTION SECTION

The Forestry Commission is charged by state law with the responsibility for protecting all state and privately owned woodland from wildfire. At present there are 12,558,258 acres of woodland and adjoining non-forest lands under Forestry Commission protection. Approximately 10% of this total area is non-forest land. The U. S. Forest Service protects 576,518 acres of National Forest, and 336,746 acres of woodland are owned and protected by other federal agencies.

The fuel beds that were created by Hurricane Hugo continue to present a serious fire threat to life and property on 4.4 million acres in the Hugo area. Phase II Plan submitted to FEMA for continued federal assistance was approved and funded for one additional year. The increased potential threat from wildland fires will remain for several years in the Hugo area.

A formal agreement between the South Carolina Forestry Commission and the U.S. Forest Service provides for mutual aid in regard to fire detection and suppression along National Forest boundaries. A similar cooperative agreement provides mutual aid for the U.S. Corps of Engineers on their lands in the Savannah River Basin. This year we entered into a similar cooperative agreement with the U.S. Fish and Wildlife Service.

Southern States Forest Fire Compact Commission

The 1954 General Assembly passed legislation enabling South Carolina to join with nine(9) other southeastern states to form a Forest Fire Compact Commission. Other states belonging to the commission are: Alabama, Georgia, Florida, Kentucky, North Carolina, Mississippi, West Virginia, Virginia, and Tennessee. Leadership of each local state Commission is composed of a Compact Administrator(the State Forester), and a four-member Advisory Committee. The Compact Administrator and Advisory Committee for South Carolina are: Robert J. Gould, State Forester; Representative Marion P. Carnell, Ware Shoals; Mr. Archer Smith, Eastover; Senator, (vacant); and Mr. Laverne Fenters, Garden City.

The thirty-eighth annual meeting of the Southeastern States Forest Fire Compact Commission (SSFFCC) was held on May 31, 1992 in Nashville, Tennessee.

Emergency Preparedness

The South Carolina Forestry Commission maintains contact and cooperates closely with the South Carolina Emergency Preparedness Agency. The Forestry Commission is the primary agency responsible for providing a number of services before, during, and after most natural or man-made disasters. It is the primary agency responsible for coordinating Forest Fire Services and timber removal in the interest

of public safety from private property during all emergencies or disasters. Support services are provided in the areas of warning operations, communications, State Emergency Operations Centers and Forward Emergency Operations Centers, urban and rural fire service, search and rescue operations, Disaster Assistance Centers operations, debris removal, and damage surveys. The Forestry Commission participates in yearly training exercises with the Emergency Preparedness Division.

Rural and Fire Protection - Title IV

The Rural Development Act of 1972, Title IV (Public Law 92-419), as amended, authorized the Secretary of Agriculture to develop a Rural Community Fire Protection Program. This program applies to rural communities throughout the country and is established to provide financial and technical assistance for organizing, training, and equipping local fire fighting forces in communities under 10,000 population. Qualifying fire departments have been able to apply for funds under this program on a 50/50 matching basis. Funds may be utilized for equipment, and breathing apparatus. Funding for 1991-92 fiscal year was \$50,116.00 and will provide assistance to 57 departments.

Excess Federal Equipment

Excess federal equipment, loaned to the Forestry Commission by the U.S. Forest Service, is provided to qualifying rural fire departments for conversion to useful pieces of fire fighting equipment. The department receiving this equipment agrees to paint, maintain, and insure it and to respond to calls from the Forestry Commission. All equipment is returned to the Forestry Commission when no longer needed by the department.

Since the Cooperative Rural Fire Program began in January of 1976, 435 vehicles, water tanks and miscellaneous equipment have been loaned to 264 rural fire departments throughout the state. At present 140 departments have in use 200 pieces of excess equipment. During the fiscal year, 19 pieces of equipment were issued or transferred to qualifying fire departments.

The 3/4 ton 4x4 pickups are the principal type vehicle we are trying to acquire. These trucks are being converted to brush trucks.

Fire Weather & Smoke Management Forecast

Regular fire weather and smoke management forecasts are provided daily to the Forestry Commission by the National Weather Service. This information is analyzed and then disseminated to other agencies and public users through the Forestry Commission's communications system. Special forecasts are also available upon request for areas with large fires and during periods of extreme fire danger.

Weather Stations

A fire weather station is located in each district. The data from these stations is used to calculate the Fire Danger Rating, which is furnished daily to all fire management personnel. These weather stations also provide special information for the National Weather Service.

Precipitation

Precipitation in South Carolina during 91-92 averaged 49.39 inches as recorded by NOAA and the South Carolina State Climatology Office. This was 1.02 inches below the State's normal annual rainfall of 50.41 inches. Stations used to calculate rainfall were Columbia, Charleston, and Greer.

AVERAGE PRECIPITATION BY MONTHS			
Month	Rainfall Inches	*Normal Inches	Departure from Normal Inches
Jul-91	10.19	5.59	+4.60
Aug-91	8.06	5.24	+2.82
Sep-91	2.06	4.51	-2.45
Oct-91	0.47	2.90	-2.52
Nov-91	1.47	2.63	-1.16
Dec-91	2.38	3.51	-1.13
Jan-92	3.02	3.97	-0.95
Feb-92	4.17	3.92	+0.25
Mar-92	4.14	5.14	-0.99
Apr-92	3.57	3.51	+0.06
May-92	4.01	4.16	-0.15
Jun-92	5.85	5.25	+0.60
Total	49.39	50.41	-1.02

FIVE-YEAR SUMMARY OF PRECIPITATION

Fiscal Year	Rainfall (inches)	Departure from Normal (inches)
1987-88	40.61	-9.80
1988-89	48.75	-1.66
1989-90	48.25	-2.16
1990-91	55.34	+4.93
1991-92	49.39	-1.02
Average	48.47	-1.94

Readiness Plan

The Commission's Readiness Plan System considers the influence of weather and fuel conditions on fire behavior, the chance of a fire starting, and the capability of the fire control organization at any given time. Readiness plans give guidance in work planning and fire control activities, allowing the Commission to perform all of its many functions while at the same time meeting fire control responsibilities. Readiness Plans are on a scale of 1-7 with 1 being the lowest state of readiness and 7 the highest.

Readiness Days 1991-92

Number of Readiness 1 Days	69
Number of Readiness 2 Days	171
Number of Readiness 3 Days	63
Number of Readiness 4 Days	58
Number of Readiness 5 Days	5
Number of Readiness 6 Days	0
Number of Readiness 7 Days	0

Smoke Management and Prescribed Fire

In the spring of 1980 Smoke Management Guidelines for Forestry Prescribed Burning Operations were adopted. This statewide program was developed by a committee of the S.C. Forestry Association in cooperation with the S.C. Forestry Commission.

In 1985, a memorandum of understanding with the S.C. Department of Health and Environmental Control expanded the S.C. Forestry Commission's responsibility for smoke management related to forestry, wildlife, and agricultural burning operations. The objective of the program is to minimize the impact of smoke from vegetative debris burning operations, thereby helping to retain the right to use prescribed fire.

The Forestry Commission offers training for Prescribed Fire Managers throughout the state. In 1992, these courses were presented in Kingstree and Walterboro with a total of 63 attendees.

Legal Fires

Legal fires are forest fires which are authorized by the landowner, started by him or his authorized agent and burn entirely upon his land.

Individual landowners reported 21,940 fires that burned an estimated 517,583

acres for various purposes during 1991-92. Forestry Commission employees conducted 677 burnsite inspections this year.

Summary of Legal Fires 1991-92

District	Hazard Reduction Hardwood Control		Wildlife Management		Agriculture		Slash in Place		Piled Debris		Total	
	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres
Camden	274	28470	30	2237	17	751	113	4805	7	175	441	36438
Florence	195	8666	27	566	2346	23284	52	2463	4985	2557	7605	37536
Kingstree	874	82401	350	49910	2063	46249	199	10747	2097	6967	5583	196274
Newberry	80	5778	51	5404	266	3531	178	9478	395	1427	970	25618
Orangeburg	469	32147	61	2036	1992	21210	412	8712	42	2312	2976	66417
Spartanburg	23	1674	20	1524	17	652	71	3987	1	1	132	7838
Walterboro	1180	68897	398	44370	2363	29760	262	3761	30	674	4233	147462
Total	3097	228033	937	106047	9064	125437	1287	43953	7557	14113	21940	517583

Law Enforcement

The Forestry Commission has 72 forest law enforcement officers. They are commissioned by the Forestry Commission under statute authority of the 1982 General Assembly. Forest law enforcement officers have statewide jurisdiction for the enforcement of forestry laws of the state and duly enacted regulations of the Forestry Commission. All forest law enforcement officers are given basic law enforcement training by the Criminal Justice Academy. Additional training in forest fire investigation is provided by the Forestry Commission. In-service training is given annually to keep officers up-to-date on changes that occur and to maintain proficiency in law enforcement skills. All forest fire management personnel are trained in preliminary forest fire investigation. In carrying out its forest law enforcement responsibilities, the Forestry Commission works closely with other state and local law enforcement agencies.

Burning Precautions

Enacted in 1969, the statewide burning Precautions Law requires that a representative of the Forestry Commission be notified before a fire is started in any woodlands, brushlands, grasslands, ditchbanks, or hedgerows or in any debris, leaves or other flammable material adjacent thereto. The law also requires that a person clear around the area to be burned, have equipment and personnel on hand to contain it and carefully supervise the burn. The State Forester may direct that fires covered under the Precautions Law not be started when deemed necessary in the interest of public safety.

SOUTH CAROLINA FORESTRY COMMISSION
LAW ENFORCEMENT FIRE LAW VIOLATIONS SUMMARY
 FROM 07/01/91 THRU 06/31/92

COUNTY	NONE	CARELESS & NEGLIGENCE	INTENTIONAL	WILLFUL & MALICIOUS	NOTIFICATION	BURNING BAN
ABBEVILLE	70	16	24	0	8	0
AIKEN	76	62	70	6	19	0
ALLENDALE	7	14	9	0	1	0
ANDERSON	59	14	11	1	1	0
BAMBERG	15	16	32	0	1	0
BARNWELL	26	25	19	0	2	0
BEAUFORT	20	17	65	2	6	0
BERKELEY	280	77	253	4	5	0
CALHOON	28	12	4	2	2	0
CHEROKEE	26	39	9	23	0	0
CHESTER	71	4	36	0	18	0
CHESTERFIELD	54	72	47	2	9	0
CLARENDON	26	101	248	3	1	0
COLLETON	87	83	176	3	14	0
DARLINGTON	72	27	83	1	4	0
DILLON	60	13	13	0	5	0
DORCHESTER	21	19	137	1	6	0
EDGEFIELD	45	7	4	0	2	0
FAIRFIELD	49	23	11	0	1	0
FLORENCE	49	29	156	1	6	0
GEORGETOWN	67	32	68	1	1	0
GREENVILLE	21	7	9	1	18	0
GREENWOOD	81	34	9	4	26	0
HAMPTON	59	2	27	0	0	0
HORRY	33	16	111	3	7	0
JASPER	20	37	159	2	1	0
KERSHAW	58	53	42	2	0	0
LANCASTER	52	43	1	0	0	0
LAURENS	70	32	28	0	0	0
LEE	62	42	38	2	34	0
LEXINGTON	197	66	56	2	9	0
LOWER CHARLESTON	16	16	63	0	1	0
MANCHESTER SF	0	0	0	0	0	0
MARION	20	10	25	0	2	0
MARLBORO	24	24	41	0	5	0
MCCORMICK	43	30	0	0	0	0
NEWBERRY	65	0	18	0	0	0
OCONEE	29	5	2	0	1	0
ORANGEBURG	47	111	160	2	6	0
PICKENS	25	13	3	0	0	0
RICHLAND	25	46	37	1	1	0
SALUDA	47	6	12	0	4	0
SAND HILLS SF	0	0	0	0	0	0
SPARTANBURG	39	48	14	1	8	0
SUMTER	54	75	118	3	7	0
UNION	74	5	0	0	0	0
UPPER CHARLESTON	15	34	56	0	1	0
WILLIAMSBURG	98	77	342	1	4	0
YORK	82	6	0	2	1	0
STATE TOTAL	2578	1552	2838	76	249	0

SOUTH CAROLINA FORESTRY COMMISSION
LAW ENFORCEMENT PROSECUTIONS & CONVICTIONS BY VIOLATION
FROM 07/01/91 THRU 06/30/92

COUNTY	CARELESS & NEGLIGENCE		INTENTIONAL		WILLFUL & MALICIOUS		NOTIFICATION		BURNING BAN		ST. FOREST REGULATION		OTHER	
	PROS.	CONV.	PROS.	CONV.	PROS.	CONV.	PROS.	CONV.	PROS.	CONV.	PROS.	CONV.	PROS.	CONV.
ABBEVILLE	1	1	0	0	0	0	0	0	0	0	0	0	0	0
AIKEN	6	6	0	0	0	0	15	14	0	0	0	0	0	0
ALLENDALE	1	1	0	0	0	0	0	0	0	0	0	0	0	0
ANDERSON	1	1	0	0	0	0	0	0	0	0	0	0	0	0
BAMBERG	0	0	0	0	0	0	4	3	0	0	0	0	0	0
BARNWELL	7	7	0	0	0	0	11	9	0	0	0	0	0	0
BEAUFORT	2	2	0	0	0	0	0	0	0	0	0	0	0	0
BERKELEY	21	20	0	0	1	0	9	9	0	0	0	0	0	0
CALHOUN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CHEROKEE	0	0	0	0	0	0	1	1	0	0	0	0	0	0
CHESTER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CHESTERFIELD	3	3	0	0	0	0	4	4	0	0	0	0	0	0
CLARENDON	10	10	0	0	0	0	7	7	0	0	0	0	0	0
COLLETON	43	39	0	0	0	0	17	17	0	0	0	0	0	0
DARLINGTON	1	1	0	0	0	0	2	2	0	0	0	0	0	0
DILLON	0	0	0	0	0	0	2	2	0	0	0	0	0	0
DORCHESTER	2	2	0	0	0	0	4	4	0	0	0	0	0	0
EDGEFIELD	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FAIRFIELD	2	2	0	0	0	0	0	0	0	0	0	0	0	0
FLORENCE	2	2	0	0	0	0	2	2	0	0	0	0	0	0
GEORGETOWN	3	2	0	0	0	0	0	0	0	0	0	0	0	0
GREENVILLE	2	2	0	0	0	0	0	0	0	0	0	0	0	0
GREENWOOD	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HAMPTON	0	0	0	0	0	0	7	7	0	0	0	0	0	0
HORRY	4	4	0	0	0	0	6	6	0	0	0	0	0	0
JASPER	2	2	0	0	0	0	1	1	0	0	0	0	0	0
KERSHAW	0	0	0	0	0	0	2	2	0	0	0	0	0	0
LANCASTER	1	1	0	0	0	0	0	0	0	0	0	0	0	0
LAURENS	1	1	0	0	0	0	0	0	0	0	0	0	0	0
LEE	1	1	0	0	0	0	3	3	0	0	0	0	0	0
LEXINGTON	50	50	0	0	0	0	5	5	0	0	0	0	0	0
LOWER CHARLESTON	0	0	0	0	0	0	4	4	0	0	0	0	0	0
MANCHESTER SF	1	1	0	0	0	0	0	0	0	0	0	0	4	4
MARION	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MARLBORO	5	4	0	0	0	0	0	0	0	0	0	0	0	0
MCCORMICK	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NEWBERRY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OCONEE	2	1	0	0	0	0	0	0	0	0	0	0	0	0
ORANGEBURG	10	10	0	0	0	0	4	4	0	0	0	0	0	0
PICKENS	5	5	0	0	0	0	0	0	0	0	0	0	0	0
RICHLAND	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SALUDA	0	0	0	0	0	0	1	1	0	0	0	0	0	0
SAND HILLS SF	0	0	0	6	0	0	0	0	0	0	0	0	61	46
SPARTANBURG	0	0	0	0	0	0	1	1	0	0	0	0	0	0
SUMTER	5	5	0	0	0	0	2	2	0	0	0	0	0	0
UNION	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UPPER CHARLESTON	5	5	0	0	0	0	2	2	0	0	0	0	0	0
WILLIAMSBURG	6	4	0	0	0	0	2	2	0	0	0	0	0	0
YORK	5	4	0	0	0	0	1	1	0	0	0	0	0	0
STATE TOTAL	215	208	0	0	1	1	120	117	0	0	0	0	65	50

Burning Precautions Law Summary 1991-1992

County	Number Notification Received	Burn Site Inspection
Abbeville	1919	24
Aiken	13083	7
Allendale	1436	7
Anderson	3156	0
Bamberg	1365	13
Barnwell	3439	32
Beaufort	2740	12
Berkeley	12181	29
Calhoun	1807	0
Charleston	6860	0
Cherokee	2146	5
Chester	1179	13
Chesterfield	6205	35
Clarendon	4087	8
Colleton	11380	13
Darlington	1602	35
Dillon	916	24
Dorchester	7236	5
Edgefield	7808	4
Fairfield	2932	30
Florence	5172	23
Georgetown	6020	15
Greenville	5871	6
Greenwood	2464	16
Hampton	3747	23
Horry	7637	35
Jasper	4662	4
Kershaw	5934	2
Lancaster	1561	8
Laurens	1951	13
Lee	896	12
Lexington	17037	35
McCormick	453	6
Marion	1427	24
Marlboro	1216	25
Newberry	1140	4
Oconee	3136	6
Orangeburg	3282	33
Pickens	1330	0
Richland	4716	0
Saluda	627	26
Spartanburg	2818	8
Sumter	6715	25
Union	738	7
Williamsburg	2452	13
York	5815	2
Total	185304	667

Fire Towers

Basic forest fire detection in the past has been accomplished by an interlocking network of forest fire lookout towers. These towers were strategically located so each tower's normal range of visibility overlaps with adjoining towers.

The Commission's long range plans are to convert from fixed (tower system) detection to aerial detection. Over time, conditions have changed and the increased use of aerial detection has proven to be more cost effective. This, linked with a proposed Communications/Dispatch system, should improve detection of forest fires and communications with the public and fire fighters.

Aerial Detection

Forestry Commission fixed wing aircraft are used to supplement tower detection, separate legal burning from wildfires, warn fire crews of danger, assist ground crews in suppression and other fire control uses, as necessary.

During Fiscal Year 1992, the Commission operated nine (9) fixed wing aircraft obtained from federal excess property. These were flown 1805.9 hours. Contract aircraft were utilized for 1516.7 hours during the same period. Total fixed wing detection aircraft use for the year was 3322.6 hours.

**Summary of Detection Aircraft
Use - Hours 1991-92**

Month	Camden District	Florence District	Kingstree District	Newberry District	Orangeburg District	Spartanburg District	Walterboro District	Piedmont Plane	Coastal Plane	Contract A/D	Total
Jul-91	6.1	4.1	3	3	4	3	3.5	3.3	0	0	30
Aug-91	9.4	0.7	3	3.1	3	0.5	3.6	3	0	0	26.3
Sep-91	10.8	2.3	2.4	3	3.2	0	4.9	5	0	0	31.6
Oct-91	18.6	13	0	8.3	11.2	0.5	15.4	28.7	0	76.9	172.6
Nov-91	30.3	27.5	13	6.5	67.8	0	35.6	18.9	0	359.3	558.9
Dec-91	63.1	48.6	51.6	23.9	56.5	0	63.2	19.2	0.8	313.3	640.2
Jan-92	24.5	8.6	20.4	4.1	29	0	1	14.3	2.3	144.8	249
Feb-92	60.3	32.5	26.4	36.1	43.6	26.8	38.8	4.1	0	162.9	431.5
Mar-92	65	55.6	63.3	30.8	68.3	14.8	49.4	12.7	1.1	231.8	592.8
Apr-92	58.8	3.4	50.4	15	52.6	17.1	21.2	42.9	5.4	223.4	490.2
May-92	11.1	0	12.7	3	3.3	3	14.4	2.5	4.7	0	54.7
Jun-92	7.8	0	4	3	6	3.4	11.4	4.9	0	4.3	44.8
Total											***
SCFC	365.8	196.3	250.2	139.8	348.5	69.1	262.4	159.5	14.3	1516.7	3322.6

*** Includes three aircraft (flying 1217.0 hours) for Hugo Area detection. ((FEMA Funded.))

Aerial Tanker Program

The primary purpose of air tankers is to assist ground crews in the initial attack of wildfires. The air tankers are used in areas of difficult terrain such as coastal swamps/bays and steep mountain slopes where the use of ground equipment is limited. Air tankers cannot replace ground crews but because of their capability to respond quickly wherever needed, they can keep a fire from spreading until ground crews can control the fire.

The Forestry Commission has used air tankers for retardant delivery on wildfires for the past 14 years. In these years, tankers were contracted for the time of peak fire occurrence in February, March, and April.

Two water scooping aerial tankers were used for the spring 92 fire season. Tankers were funded with FEMA funds and were used in the Hurricane Hugo damaged area. Both tankers were Super PBY aircraft with the ability to deliver 1500 gallons of water/retardant in one load. One tanker was stationed at Moncks Corner Airport from January 25 through April 13, 1992. The other was stationed at Sumter County Airport from February 8 through April 22, 1992. These two air tankers were capable of scooping water from nearby sources and adding foam retardant to the mix while in flight. The tankers flew 55.1 hours and dropped 166,000 gallons of retardant in 173 drops on 40 separate fires.

South Carolina Forestry Commission Aerial Tanker Program Statistics.

Year	#Aircraft	Days Stanby	Flight Hours	Cost of Program	Availability Costs/Day	Flight time Costs/Hours
80	3	119	6:20	\$55,632	\$310	\$490
81	2	94	53:11	\$100,894	\$545	\$590
82	2	83	15:56	\$72,423	\$585	\$630
83	2	90	3:55	\$67,733	\$624	\$697
84	2	93	5:16	\$74,042	\$636	\$639
85	2	134	105:10	\$181,000	\$590	\$670
86	2	96	9:26	\$60,351	\$549	\$571
87	2	90	10:52	\$70,856	\$522	\$538
88	2	84	31:44	\$78,439	\$570	\$660
89	2	90	4:06	\$72,000	\$585	\$595
90	2 (CL215)	165	83:18	\$701,410	\$3,233	\$1,850
91	1 (CL215)	75	32:51	\$325,964	\$3,437	\$2,075
	1 (PBY)	75	22:15	\$244,655	\$2770	\$1770
92	2 (PBY)	155	55:06	\$471,939	\$2,599 (Aver.)	\$1,390 (Aver.)

Helicopter Delivery Program

Three helicopters were operational for the year. The helicopters were obtained from the Federal Excess Property Program and were used in fire suppression by dropping foam injected water on forest fires. During the year, the Commission helicopters flew 82.2 hours while completing 263 drops(78,900 gallons) on nine separate forest fires.

Marine Corps Air Station

In December 1986 the Forestry Commission and the Commanding Officer, Marine Corps Air Station, Beaufort entered into an agreement under which the Air Station can provide helicopter delivery of aerial retardants on forest fires. In February 1987, training was given to Air Station and Rural Fire Department personnel in fire behavior, fire tactics, communication, and retardant drops. Station helicopters were not called upon in FY-92 but they will be available resources in the years ahead.

Forest Fire Suppression

Forest fire occurrence and acreage losses were about average for the 1991-92 fire season. The greatest losses occurred during December, February, and March.

The fiscal year totals were 7,331 fires burning 41,835 acres. Berkeley County experienced the greatest losses with 7,033 acres burned. Counties experiencing losses exceeding 2,000 acres in addition to Berkeley included Clarendon, Colleton, and Williamsburg. These four counties accounted for forty-one percent of the acreage burned.

Incendiary fires accounted for forty-seven (47) percent of all fires and fifty-five (55) percent of the total acreage burned. Debris burning was second with thirty-one (31) percent of all fires and thirty (30) percent of acreage losses.

The average size fire was 5.7 acres with thirty three-hundredths of one percent of the acreage protected being burned.

SOUTH CAROLINA FORESTRY COMMISSION FOREST LAND FIRES BY COUNTY AND CAUSE FISCAL YEAR 92

COUNTY	LIGHTNING NO. ACRES		CAMPFIRE NO. ACRES		SMOKING NO. ACRES		DEBRIS BURNING NO. ACRES		INCENDIARY NO. ACRES		EQUIPMENT USE NO. ACRES		RAILROAD NO. ACRES		CHILDREN NO. ACRES		MISC. NO. ACRES		TOTAL NO. ACRES	
ABBEVILLE	1	.5			3	1.2	22	72.2	18	61.4	7	17.0	1	2.0	2	.4	6	4.6	60	159.3
AIKEN	3	1.4			2	2.0	76	274.2	69	191.2	6	8.4	2	75.3	11	17.5	18	141.3	187	711.3
ALLENDALE			1	1.0	1	.5	14	28.8	7	29.8	2	16.2							25	76.3
ANDERSON			1	4.0	29	83.5	21	33.5	10	27.5	2	7.0			4	5.5	6	61.0	73	222.0
BAMBERG	1	.1					16	32.5	30	83.3	2	5.5			1	.2	2	15.2	52	136.8
BARNWELL	1	.1			3	.7	12	51.1	17	115.9	6	3.9			2	8.2	4	3.2	45	183.1
BEAUFORT							18	68.3	41	140.1	1	.1			1	1.0	4	4.2	65	213.7
BERKELEY			1	40.0	1	.1	142	1702.5	438	5046.9	5	22.5	3	28.0	2	3.5	10	52.8	602	6896.3
CALHOUN					2	5.0	24	65.9	5	7.6	3	5.1			2	1.1	5	6.4	41	91.1
CHESTER					8	24.4	18	68.8	28	61.2			1	2.0	6	18.0	11	51.0	72	225.4
CHESTERFIELD					19	46.6	17	28.7	6	41.0					6	17.2	3	5.1	51	138.6
CLARENDON	4	148.8	1	70.0	11	19.8	56	275.0	35	264.1	5	11.6	5	6.5	7	26.2	2	7.0	126	829.0
COLLETON					4	32.0	72	562.7	207	1310.2	11	49.7			4	51.3	2	17.0	300	2022.9
DARLINGTON					4	29.0	98	1356.7	154	865.9	5	85.1			3	13.1	11	24.3	275	2374.1
DILLON	3	21.3	1	52.0	1	12.0	58	268.9	70	297.7	6	8.2	1	.5	12	31.0	10	45.7	162	757.3
DORCHESTER					10	14.5	34	49.4	13	14.4	6	27.4	3	41.3	2	1.3	18	29.2	86	177.5
EDGEFIELD					36	174.8	145	914.6							1	3.0	2	2.0	184	1094.4
FAIRFIELD					12	59.3	2	12.1	5	30.0					7	19.8	17	41.3	49	189.7
FLORENCE	1	12.0	1	.3	9	14.8	7	12.2	6	6.9			2	.7	3	5.1	5	9.7	46	75.5
GEORGETOWN					53	187.8	148	1069.6	7	37.7					12	20.7	3	2.1	224	1318.9
GREENVILLE	1	.1			41	135.9	106	596.1	6	40.2					5	171.1	4	3.6	163	947.0
HAMPTON			1	10.0	2	1.5	24	83.1	10	17.6					4	3.5	6	13.7	47	129.4
HARTWELL	1	.2	1	1.0	13	11.0	44	126.8	11	29.9	13	14.1	7	17.2	17	24.6	18	42.2	125	267.0
HORRY	3	7.1			1	1.0	23	82.4	40	84.7	7	32.8	3	7.2	4	4.1			81	219.3
JAMPER			1	20.0	31	93.2	108	755.1	4	4.9					12	25.0	10	7.6	166	905.8
KERDEW	1	20.0			1	7.0	41	269.5	171	740.3	1	.5	1	15.0	2	1.5	3	4.5	221	1058.3
LANCASTER	4	4.3			2	9.2	55	206.8	43	131.9	6	23.2	1	.2	8	10.6	10	20.3	129	406.5
LAURENS			1	.5	10	31.5	34	176.8	4	78.0	5	8.2			8	9.1	5	7.0	67	311.1
LEE			2	3.0	7	37.0	20	48.0	20	107.0	1	.5	1	1.0	5	14.5	12	57.5	68	268.5
LEXINGTON					2	2.1	49	498.7	82	614.5	2	3.5			12	175.8			147	1294.6
LOWER CHAR.	5	22.2	5	24.2	5	4.0	148	259.9	53	89.7	17	14.6	1	.4	53	105.2	44	173.2	331	693.4
MARION	1	3.0			24	64.0	64	326.6							2	6.1			91	399.7
MARLBORO	1	.5	2	2.2	8	15.1	26	75.0	6	5.6					2	1.5	6	8.8	52	110.7
MCCORMICK					3	1.7	24	134.9	32	81.3	2	5.5			5	5.7	3	1.9	69	231.0
MECKLENBURG					15	38.4	12	33.8	4	86.1			9	2.3	1	.1	10	8.1	51	168.8
NEWBERRY	1	3.0	2	2.0	6	4.8	13	35.4	12	17.8	7	19.2	1	.2	3	2.0	9	10.5	54	94.9
OCONEE	2	.3			1	3.0	13	31.7	1	.2					1	.3	9	24.4	27	59.9
ORANGEBURG	1	1.0	2	2.6	8	25.8	85	239.4	149	751.2	14	45.4	1	1.0	4	5.6	8	38.0	272	1110.0
PICKENS					9	14.8	17	38.5	5	12.0	2	17.0			3	2.0	3	7.0	39	91.3
RICHLAND	1	20.0	1	3.0	1	4.0	20	103.0	46	238.0			1	2.0	13	24.1	12	144.0	95	538.1
SALUDA			1	1.0	3	95.6	13	14.8	6	8.7	9	69.5			8	58.1			40	247.7
SPARTANBURG			1	1.0	11	34.5	32	182.9	10	53.5	4	6.0			6	47.0	5	6.5	69	331.4
SUMTER					70	470.7	129	818.1							1	2.0	14	57.4	214	1348.2
UNION					7	14.5			1	2.0							1	6.0	21	127.5
UPPER CHAR.	1	40.0	2	152.0	37	194.7	54	1000.1			4	130.5			2	30.0			100	1567.3
WILLIAMSBURG	1	1.0	2	17.0	114	853.3	385	3099.4	10	32.4					2	3.0	2	1.6	517	4017.7
YORK	1	.2	2	4.0	3	5.0	16	21.5	6	81.8	1	1.0	1	12.0	8	10.2	9	16.4	47	152.1
TOTAL	39	307.1	34	416.8	213	709.6	1825	9823.1	3035	20364.9	220	967.5	45	214.8	251	713.3	366	1453.3	6028	34970.4

SOUTH CAROLINA FORESTRY COMMISSION
TOTAL ALL LAND FIRES BY COUNTY AND CAUSE FISCAL YEAR 92

COUNTY	LIGHTNING		CAMPFIRE		SMOKING		DEBRIS BURNING		INCENDIARY		EQUIPMENT USE		RAILROAD		CHILDREN		MISC.		TOTAL	
	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES
ABBEVILLE	1	.5	1	1.0	7	3.8	49	160.0	27	88.6	15	61.7	2	4.0	6	11.1	10	15.5	118	346.2
AIKEN	3	1.4			3	2.2	95	393.2	79	218.8	13	31.8	2	75.3	14	56.3	24	158.7	233	937.7
ALLENDALE			1	1.0	3	1.4	16	64.5	9	47.2	3	17.0							32	131.1
ANDERSON			1	4.0	34	135.5	26	62.0	12	91.5	2	11.0			4	5.5	7	69.5	86	379.0
BAMBERG	1	.1			1	.1	17	41.8	39	138.8	4	17.5			1	.2	2	15.2	65	213.7
BARNWELL	2	.3			7	1.3	22	100.7	23	143.1	10	6.2			4	9.2	4	4.6	72	265.4
BEAUFORT							35	107.2	67	283.7	2	2.1			2	3.0	4	9.2	110	405.2
BERKELEY	1	5.0	1	40.0	1	.1	147	1725.0	447	5143.1	5	25.5	3	32.0	3	4.0	11	57.9	619	7032.6
CALHOUN	1	.1			2	5.0	28	108.3	7	15.1	3	16.0			3	9.3	5	16.4	49	170.2
CHEROKEE					13	43.3	25	83.5	34	73.7	2	20.2	1	2.0	7	18.1	15	87.2	97	328.0
CHESTER							38	103.8	33	93.6	41	74.7	2	.6	9	18.4	7	13.3	130	304.4
CHESTERFIELD	5	149.0	2	70.1	18	46.7	82	361.8	45	282.6	8	18.1	6	6.7	9	33.4	5	27.2	180	995.6
CLARENDON					4	32.0	94	1094.1	255	1866.1	18	77.2			8	53.5	2	17.0	381	3139.9
COLLETON	1	5.0			5	37.3	129	1482.3	194	1180.3	12	89.0			6	18.2	16	28.4	363	2840.5
DARLINGTON	3	21.3	1	52.0	1	12.0	65	310.1	81	337.3	9	9.5	1	.5	14	46.8	11	64.7	186	854.2
DILLON					10	26.2	36	51.9	13	14.4	6	27.4	3	49.3	2	1.3	19	33.3	89	203.8
DORCHESTER							36	176.8	158	1036.3			1	.1	1	3.0	4	2.6	200	1218.8
EDGEFIELD			2	6.0	6	31.3	16	137.3	2	12.1	5	37.0			8	40.3	19	46.9	58	310.9
FAIRFIELD	1	12.0	1	.3	19	17.2	15	31.0	11	13.2	21	25.1	4	1.1	3	5.1	9	17.0	84	122.0
FLORENCE					1	1.0	62	225.2	159	1205.9	8	50.5			13	24.2	3	2.1	246	1508.9
GEORGETOWN	1	.1					45	143.9	107	638.6	6	40.2			5	171.1	5	4.6	169	998.5
GREENVILLE			2	11.0	2	2.0	26	129.7	15	21.5	4	13.5					7	16.2	56	193.9
GREENWOOD	1	.2	2	1.3	16	14.4	57	154.4	12	30.2	18	45.7	8	22.2	20	26.1	20	48.0	154	342.5
HAMPTON	4	8.1			2	1.1	32	118.8	51	106.7	10	33.3	4	7.5	.6	4.7			109	280.2
HORRY			1	20.0			31	96.8	109	767.7	4	6.4			12	25.0	10	10.1	167	926.0
JASPER	1	20.0			1	7.0	43	289.5	185	818.8	1	1.0	1	15.0	2	1.5	4	4.6	238	1157.4
KERSHAW	6	10.3			3	9.7	64	281.7	50	184.9	7	26.7	1	.2	8	10.6	12	21.5	151	545.6
LANCASTER	2	1.4		.5	13	35.9	50	203.2	7	78.7	9	10.3			11	11.0	9	10.2	102	351.2
LAURENS			3	4.0	13	73.5	50	136.0	26	121.0	3	4.5	3	3.0	6	15.5	26	96.0	130	453.5
LEE					4	3.2	57	539.5	91	720.5	4	19.5			1	.5	16	184.5	173	1467.7
LEXINGTON	5	22.2	5	24.2	5	4.0	150	263.9	54	91.2	17	14.6	1	.4	53	105.2	44	173.2	334	698.9
LOWER CHAR.	1	3.0					25	68.1	68	385.2							2	6.1	96	462.4
MARION	1	.5	2	2.2	2	2.1	10	17.4	26	76.0	6	5.8			2	2.0	6	11.8	55	117.8
MARLBORO			1	.3	3	1.7	33	168.6	41	130.1	5	32.8	1	.1	5	5.7	6	3.0	95	342.3
MCCORMICK	1	1.0	1	1.0	18	52.5	15	46.1			5	88.2	17	3.1	1	.1	15	11.7	73	203.7
NEWBERRY	2	3.1	2	2.0	6	4.8	16	71.4	19	18.5	24	24.5	1	.2	3	2.0	10	10.9	83	137.4
OCONEE	2	.3			1	3.0	18	67.1	2	.5	1	3.0			1	.3	13	28.3	38	102.5
ORANGEBURG	1	1.0	2	2.6	16	62.9	104	402.6	168	1065.5	22	93.3	1	1.0	7	17.2	10	53.7	331	1699.8
PICKENS					9	15.3	18	64.1	6	13.5	2	17.5			3	2.0	3	7.0	41	119.4
RICHLAND	2	25.0	1	4.0	2	5.0	24	131.0	49	305.0			2	3.0	15	28.1	13	147.1	108	648.2
SALUDA			1	1.0	5	98.9	25	60.3	11	11.1	16	98.4			11	61.7	69	331.4		
SPARTANBURG			1	1.0	19	57.5	47	228.4	19	102.0	7	14.4			8	51.0	9	51.5	110	505.8
SUMTER	3	85.5					85	663.9	146	957.3					2	2.5	17	110.8	253	1820.0
UNION					22	129.5	50	123.5	1	2.0							6	13.5	79	268.5
UPPER CHAR.	1	40.0	2	152.0			42	215.3	55	1006.7	4	150.6					2	30.0	106	1594.6
WILLIAMSBURG	1	1.0	2	17.0	1	10.0	114	877.3	389	3165.0	10	32.4			2	3.0	3	8.3	522	4114.0
YORK	2	.3	3	4.2	5	9.2	41	90.1	8	83.8	1	1.0	1	12.0	11	16.7	19	26.4	91	243.7
TOTAL	56	417.7	42	422.7	303	999.6	2305	12473.1	3410	23187.4	373	1395.1	66	239.3	301	862.7	475	1837.4	7331	41835.0

SOUTH CAROLINA FORESTRY COMMISSION
FOREST LAND FIRES BY COUNTY AND CLASS
FISCAL YEAR 92

	CLASS A		CLASS B		CLASS C		CLASS D		CLASS E		CLASS F		CLASS G		TOTAL	
	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES
ABBEVILLE	14	1.6	42	90.7	4	67.0									60	159.3
AIKEN	43	6.1	129	291.2	15	414.0									187	711.3
ALLENDALE	5	.8	17	30.5	3	45.0									25	76.3
ANDERSON			70	148.0	3	74.0									73	222.0
BAMBERG	17	2.2	31	73.6	4	61.0									52	136.8
BARNWELL	11	1.5	28	44.3	6	137.3									45	183.1
BEAUFORT	13	1.7	46	114.0	6	98.0									65	213.7
BERKELEY	65	7.2	376	933.1	152	3856.0	7	1300.0	2	800.0					602	6896.3
CALHOUN	12	1.5	27	61.6	2	28.0									41	91.1
CHEROKEE	2	.2	66	145.2	4	80.0									72	225.4
CHESTER	9	1.2	39	90.4	3	47.0									51	138.6
CHESTERFIELD	29	4.2	84	184.0	11	331.8	2	309.0							126	829.0
CLARENDON	41	4.8	214	509.1	42	934.0	3	575.0							300	2022.9
COLLETON	43	5.5	171	434.6	55	1079.0	6	855.0							275	2374.1
DARLINGTON	21	3.1	118	299.2	23	435.0									162	737.3
DILLON	28	4.1	54	78.4	4	95.0									86	177.5
DORCHESTER	6	.7	143	400.7	35	693.0									184	1094.4
EDGEFIELD	10	1.4	33	109.3	6	79.0									49	189.7
FAIRFIELD	11	1.7	34	61.8	1	12.0									46	75.5
FLORENCE	32	4.7	153	389.2	38	800.0	1	125.0							224	1318.9
GEORGETOWN	26	3.6	116	296.4	20	487.0	1	160.0							163	947.0
GREENVILLE	7	1.1	37	76.3	3	52.0									47	129.4
GREENWOOD	21	4.1	98	150.9	6	112.0									125	267.0
HAMPTON	20	2.2	56	134.1	5	83.0									81	219.3
HORRY	16	2.6	126	232.2	23	431.0	1	240.0							166	905.8
JASPER	44	6.0	141	357.3	36	695.0									221	1058.3
KERSHAW	34	5.2	85	179.3	10	222.0									129	406.5
LANCASTER	7	1.3	54	88.8	6	221.0									67	311.1
LAURENS			63	139.5	5	129.0									68	268.5
LEE	13	1.6	103	249.5	29	843.5	2	200.0							147	1294.6
LEXINGTON	116	15.4	201	368.0	14	310.0									331	693.4
LOWER CHAR.	11	1.4	69	212.3	11	186.0									91	399.7
MARION	18	2.8	32	59.9	2	48.0									52	110.7
MARLBORO	8	1.0	57	120.0	4	110.0									69	231.0
MCCORMICK	26	3.3	21	46.5	4	119.0									51	168.8
NEWBERRY	10	1.6	41	62.3	3	31.0									54	94.9
OCONEE	4	.6	23	59.3											27	59.9
ORANGEBURG	38	5.0	207	481.5	27	623.5									272	1110.0
PICKENS	3	.5	34	65.8	2	25.0									39	91.3
RICHLAND	1	.1	83	235.0	10	198.0	1	105.0							95	538.1
SALUDA	9	1.0	28	71.7	3	175.0									40	247.7
SPARTANBURG			60	134.4	9	197.0									69	331.4
SUMTER	15	1.9	165	457.8	33	743.5	1	145.0							214	1348.2
UNION			19	47.5	2	80.0									21	127.5
UPPER CHAR.	18	2.2	51	108.1	26	682.0	5	775.0							100	1567.3
WILLIAMSBURG	35	4.2	379	1201.5	101	2232.0	1	230.0	1	350.0					517	4017.7
YORK	3	.5	41	66.6	3	85.0									47	152.1
TOTAL	915	123.4	4265	10191.4	814	18486.6	31	5019.0	3	1150.0					6028	34970.4

CLASS A <=.25; CLASS B .26-9.9; CLASS C 10-99; CLASS D 100-299; CLASS E 300-999; CLASS F 1000-4999; CLASS G > 5000

SOUTH CAROLINA FORESTRY COMMISSION
TOTAL ALL LAND FIRES BY COUNTY AND CLASS
FISCAL YEAR 92

	CLASS A		CLASS B		CLASS C		CLASS D		CLASS E		CLASS F		CLASS G		TOTAL	
	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES
ABBEVILLE	33	4.2	74	158.0	11	184.0									118	346.2
AIKEN	51	7.8	159	375.9	23	554.0									233	937.7
ALLENDALE	5	.8	23	58.3	4	72.0									32	131.1
ANDERSON			78	201.0	8	178.0									86	379.0
BAMBERG	22	2.9	36	102.8	7	108.0									65	213.7
BARNWELL	22	3.3	42	79.9	8	182.2									72	265.4
BEAUFORT	16	2.4	81	194.8	13	208.0									110	405.2
BERKELEY	68	7.5	386	969.1	156	3956.0	7	1300.0	2	800.0					619	7032.6
CALHOUN	13	1.7	31	80.5	5	88.0									49	170.2
CHEROKEE	8	1.2	82	171.8	7	155.0									97	328.0
CHESTER	47	6.0	75	153.4	8	145.0									130	304.4
CHESTERFIELD	44	6.3	117	251.3	17	429.0	2	309.0							180	995.6
CLARENDON	80	9.0	239	651.4	57	1264.5	3	365.0	2	850.0					381	3139.9
COLLETON	71	8.9	219	552.6	67	1424.0	6	855.0							363	2840.5
DARLINGTON	25	3.7	134	362.5	27	488.0									186	854.2
DILLON	25	3.6	60	101.2	4	99.0									89	203.8
DORCHESTER	11	1.3	148	400.5	41	817.0									200	1218.8
EDGEFIELD	12	1.6	34	116.3	12	193.0									58	310.9
FAIRFIELD	33	5.1	48	82.9	3	34.0									84	122.0
FLORENCE	34	4.9	168	441.6	43	937.4	1	125.0							246	1508.9
GEORGETOWN	29	4.1	116	292.4	23	542.0	1	160.0							169	998.5
GREENVILLE	8	1.3	41	83.6	7	109.0									56	193.9
GREENWOOD	29	5.3	117	180.2	8	157.0									154	342.5
HAMPTON	32	3.6	69	148.6	8	128.0									109	280.2
HORRY	16	2.7	127	249.3	23	434.0	1	240.0							167	926.0
JASPER	53	7.3	146	390.1	39	760.0									238	1157.4
KERSHAW	39	6.3	96	198.3	16	341.0									151	545.6
LANCASTER	15	2.9	81	127.3	6	221.0									102	351.2
LAURENS			121	273.5	9	180.0									130	453.5
LEE	20	2.6	116	271.6	35	993.5	2	200.0							173	1467.7
LEXINGTON	116	15.4	204	373.5	14	310.0									334	698.9
LOWER CHAR.	11	1.3	68	201.1	17	260.0									96	462.4
MARION	20	3.0	33	66.8	2	48.0									55	117.8
MARLBORO	16	2.0	69	140.3	10	200.0									95	342.3
MCCORMICK	38	4.6	30	58.1	5	141.0									73	203.7
NEWBERRY	31	4.3	48	67.1	4	66.0									83	137.4
OCONEE	9	1.3	26	51.2	3	50.0									38	102.5
ORANGEBURG	44	5.7	241	624.6	46	1069.5									331	1699.8
PICKENS	2	.3	36	61.8	3	57.3									41	119.4
RICHLAND	2	.2	87	231.0	18	311.0	1	106.0							108	648.2
SALUDA	19	2.1	44	116.3	6	213.0									69	331.4
SPARTANBURG			97	243.8	13	262.0									110	505.8
SUMTER	19	2.4	185	536.6	47	1036.0	2	245.0							253	1820.0
UNION			73	106.5	6	162.0									79	268.5
UPPER CHAR.	19	2.5	55	120.1	27	697.0	5	775.0							106	1594.6
WILLIAMSBURG	37	4.5	378	1204.5	105	2325.0	1	230.0	1	350.0					522	4114.0
YORK	7	1.2	80	145.5	4	97.0									91	243.7
TOTAL	1251	169.1	5018	12069.5	1025	22686.4	32	4910.0	5	2000.0					7331	41835.0

CLASS A <=.25; CLASS B .26-9.9; CLASS C 10-99; CLASS D 100-299; CLASS E 300-999; CLASS F 1000-4999; CLASS G > 5000

SOUTH CAROLINA FORESTRY COMMISSION FOREST LAND FIRES BY COUNTY AND MONTH FISCAL YEAR 92

	JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		TOTAL	
	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES
ABBEVILLE	2	.8			2	2.5	3	1.5	4	3.7	10	33.9	3	6.2	14	55.4	11	28.1	6	18.3	4	8.4	1	.3	60	159.3
AIKEN	4	3.5			1	4.0	18	71.7	14	18.8	25	115.8	5	34.5	33	101.2	25	100.8	31	93.1	23	141.9	8	26.0	187	711.3
ALLENDALE									2	8.0	7	5.0	2	4.5	4	7.1	5	28.8	3	21.5	2	1.4			25	76.3
ANDERSON	1	4.0	1	1.0			8	15.0	7	9.0	11	83.0	14	44.0	14	30.6	11	22.0	4	5.4	2	8.0			73	222.0
BAMBERG							2	26.0	4	6.7	16	37.7	6	7.9	4	17.6	13	17.0	4	19.7	3	4.2			52	136.8
BARNWELL					1	2.0	1	.7	3	1.2	12	18.5	6	7.9	7	26.3	8	124.5	3	1.1	4	.9			45	183.1
BEAUFORT	1	.1	1	15.0	1	.1			9	20.1	22	67.0	10	13.0	10	54.6	9	36.8	2	7.0					65	213.7
BERKELEY	5	30.5			3	8.1	41	64.5	33	154.9	125	1120.0	68	1074.0	98	765.2	144	3050.6	68	565.5	14	46.0	3	17.0	602	6896.3
CALHOUN							2	5.0	8	18.7	10	27.5	3	.8	6	14.0	7	9.0	4	16.0			1	.1	41	91.1
CHEROKEE	4	4.0					3	8.0	7	7.0	3	12.0	5	27.6	21	68.3	11	25.0	15	67.4	3	6.1			72	225.4
CHESTER	3	2.3					3	7.0	9	43.6	5	6.7	1	.1	10	32.8	9	22.5	6	18.5	4	3.1	1	2.0	51	138.6
CHESTERFIELD	5	13.8	2	10.2	2	5.0	2	1.1	9	10.4	18	71.1	11	8.4	30	321.7	26	149.1	19	167.9	2	70.3			126	829.0
CLARENDON	2	.6			3	1.2	9	14.7	21	84.8	79	481.9	20	219.5	40	222.6	67	438.6	46	537.8	12	21.1	1	.1	300	2022.9
COLLINGS			1	3.0	2	2.2	3	7.3	36	119.4	41	267.7	18	63.5	40	1041.7	85	653.2	26	153.7	20	59.1	3	3.3	275	2374.1
DARLINGTON	3	1.4					9	17.7	19	34.7	31	123.3	6	6.8	24	114.5	29	110.6	27	200.1	8	92.0	6	36.2	162	737.3
DILLON	4	42.2	1	1.0			8	6.0	13	8.6	11	42.3	4	2.6	10	7.5	9	9.8	16	45.1	5	5.9	5	6.5	86	177.5
DORCHESTER					1	1.0	5	15.0	25	47.9	55	283.4	23	130.0	25	136.5	32	315.5	12	143.1	6	22.0			184	1094.4
EDGEFIELD			1	.1	1	4.0	7	4.7	9	16.5	4	17.7	6	31.1	5	40.0	8	32.6	2	12.0	6	31.0			49	189.7
FAIRFIELD					4	13.9	7	11.9	5	15.3	3	7.4	2	1.2	7	11.1	7	7.8	9	4.6	2	2.3			46	75.5
FLORENCE	1	.1			1	3.0	5	7.6	18	47.0	58	562.1	7	60.5	36	155.4	40	264.9	40	189.0	13	27.7	5	1.6	224	1318.9
GEORGETOWN	4	3.7					4	3.3	7	12.0	30	225.0	13	25.5	20	87.8	48	435.8	30	142.0	6	11.8	1	.1	163	947.0
GREENVILLE							5	14.8	2	1.2	2	2.5	3	1.6	11	21.3	9	29.0	12	54.5	2	4.0	1	.5	47	129.4
GREENWOOD	3	1.7	1	.2	4	1.7	13	15.2	15	27.1	14	46.4	11	34.2	29	91.8	11	10.5	14	19.3	8	16.7	2	2.2	125	267.0
HAMPTON	1	1.0			2	1.0	3	1.2	2	7.5	11	24.2	9	17.0	8	22.3	25	79.6	13	54.6	7	10.9			81	219.3
HORRY					1	.5	4	12.0	12	16.8	47	133.3	13	11.5	14	62.5	40	208.9	28	451.9	6	4.4	1	4.0	166	905.8
JASPER	1	4.0	7		1	4.0	7	7.6	25	102.5	32	201.1	24	78.3	30	125.7	72	411.4	23	83.8	6	43.4	1	.5	221	1058.3
KERSHAW	10	17.9			3	1.4	11	6.9	12	18.9	14	43.9	8	10.6	23	200.4	26	81.3	16	19.3	5	5.6	1	.3	129	406.5
LANCASTER							2	27.0	2	6.0	14	48.3	8	7.7	17	46.9	12	161.8	10	10.4	2	3.0			67	311.1
LAURENS	2	1.5					8	14.0	8	69.0	3	42.0	1	1.0	17	53.0	9	25.0	12	52.5	8	10.5			68	268.5
LEE					5	9.1	9	20.5	10	63.1	27	167.7	12	29.6	25	284.1	23	289.5	28	387.0	7	41.5	1	2.5	147	1294.6
LEXINGTON	3	3.9			6	12.8	36	46.8	49	75.5	36	50.0	33	67.6	51	89.0	49	171.5	47	140.5	17	33.0	4	2.8	331	693.4
LOWER CHAR.					1	.5	3	36.5	7	33.5	22	75.3	11	24.7	9	52.7	23	134.9	11	36.1	4	5.5			91	399.7
MARION	1	.5			1	1.5	2	.4	4	.8	12	29.7		2	29.5	12	18.4	12	26.3	6	3.6			52	110.7	
MARLBORO	1	.7					1	.5	5	16.6	9	15.4	4	11.0	15	68.7	14	19.6	14	84.7	5	11.8	1	2.0	69	231.0
MCCORMICK					1	.1	9	3.8	13	24.3	6	13.3	3	.9	5	26.3	3	12.0	5	85.5	6	2.6			51	168.8
NEWBERRY	4	5.5			1	.2	11	10.3	9	22.2	6	6.5	1	.5	13	26.0	3	16.0	6	7.7					54	94.9
OCONEE	1	.1					1	.2	3	5.0	1	1.5	3	13.0	7	7.8	1	.6	8	21.9	2	9.8			27	59.9
ORANGEBURG	1	1.5	1	.5	3	4.1	10	24.9	30	67.6	86	393.5	26	92.7	29	108.5	30	300.5	30	112.9	4	2.7	2	.6	272	1110.0
PICKENS							5	4.2	6	7.5	6	10.7	2	4.5	4	28.0	5	5.6	9	28.3	2	2.5			39	91.3
RICHLAND	2	3.5					3	12.0	6	19.0	23	99.5	3	35.0	8	54.0	14	71.5	22	88.1	12	147.5	2	8.0	95	538.1
SALUDA							7	123.6	11	22.9	5	5.8	3	3.5	5	18.0	4	57.6			3	12.0	2	4.3	40	247.7
SPARTANBURG					1	1.0	8	20.5	5	67.4	11	23.0	12	39.5	13	55.5	6	32.5	9	81.0	4	11.0			69	331.4
SUMTER	4	7.5			2	16.5	8	72.1	26	124.5	59	504.4	18	47.5	34	189.6	27	182.2	23	150.2	12	52.2	1	1.5	214	1348.2
UNION					2	1.0	3	7.5	2	8.5	1	1.0	6	41.0	2	8.5	2	55.5	2	4.0			1	.5	21	127.5
UPPER CHAR.	2	21.1					2	2.1	10	232.1	24	197.9	8	46.6	22	312.7	15	426.2	12	285.6	5	43.0			100	1567.3
WILLIAMSBURG	3	9.5			6	9.2	19	60.0	49	208.6	112	1007.5	23	99.6	72	527.9	135	1106.4	85	931.5	13	57.5			517	4017.7
YORK	2	2.1					7	10.5	5	25.0	4	8.3	2	3.0	7	5.7	5	15.0	10	77.7	4	4.5	1	.3	47	152.1
TOTAL	79	185.0	9	31.0	62	111.6	337	843.8	590	1961.4	1163	6761.7	480	2491.7	930	5828.3	1199	9806.0	834	5724.1	289	1102.4	56	123.4	6028	34970.4

SOUTH CAROLINA FORESTRY COMMISSION
FOREST LAND FIRES BY COUNTY AND MONTH FISCAL YEAR 92

SOUTH CAROLINA FORESTRY COMMISSION
TOTAL ALL LAND FIRES BY COUNTY AND MONTH FISCAL YEAR 92

	JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		TOTAL	
	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES	NO.	ACRES
ABBEVILLE	3	5.0	2	2.2	2	2.5	5	6.5	4	3.7	17	52.8	13	16.5	29	140.8	19	67.2	11	27.2	11	18.7	2	3.1	118	346.2
AIKEN	4	3.5	1	5.0	1	4.0	22	82.7	19	32.9	28	141.7	12	54.0	44	188.9	34	151.9	35	97.8	24	142.1	9	33.2	233	937.7
ALLENDALE					1	.4			3	10.0	9	11.5	2	12.0	5	24.4	5	38.8	4	27.3	2	1.7	1	5.0	32	131.1
ANDERSON	2	6.0	1	1.0			9	20.5	7	9.0	14	136.5	17	84.5	17	72.6	12	32.5	5	8.4	2	8.0			86	379.0
BAMBERG	1	4.0			3	26.1	4	6.7	20	61.1	8	12.0	6	26.8	16	53.1	4	19.7	3	4.2					65	213.7
BARNWELL	1	3.5	1	.5	2	2.1	4	3.0	7	5.2	16	46.2	8	9.5	12	46.1	10	146.6	6	1.6	5	1.1			72	265.4
BEAUFORT	1	.1	1	15.0	2	5.1	1	1.0	15	58.1	35	162.7	20	33.2	18	71.8	15	50.2	2	8.0					110	405.2
BERKELEY	5	30.5			4	8.6	42	64.6	33	158.4	131	1168.6	72	1077.6	100	788.2	145	3074.1	69	585.0	15	60.0	3	17.0	619	7032.6
CALHOUN					2	3.1	3	16.0	9	61.9	10	35.5	3	.8	9	21.0	8	12.8	4	19.0			1	.1	49	170.2
CHEROKEE	6	5.6			1	.2	4	16.0	11	12.3	8	15.4	6	27.9	27	146.7	15	30.1	16	67.7	3	6.1			97	328.0
CHESTER	3	2.3					3	56.0	12	50.6	40	43.4	11	8.5	24	79.0	13	30.8	17	28.1	6	3.7	1	2.0	130	304.4
CHESTERFIELD	5	13.8	2	10.2	3	5.1	5	12.2	12	25.3	24	82.3	19	40.6	45	388.9	30	166.7	30	177.9	3	70.4	2	2.2	180	995.6
CLARENDON	2	.6			7	9.0	13	47.8	26	150.9	94	746.8	32	336.8	60	517.5	78	530.5	53	778.0	14	21.8	2	.2	381	3139.9
COLLETON			2	5.1	3	2.5	8	11.6	50	173.9	60	325.3	39	248.4	56	1146.6	91	696.2	30	166.5	21	61.1	3	3.3	363	2840.5
DARLINGTON	6	3.7					10	22.7	21	48.8	34	147.2	9	21.1	32	134.6	31	125.9	28	209.1	8	93.0	7	48.1	186	854.2
DILLON	4	43.1	1	1.0			8	6.0	14	15.5	12	47.3	5	11.6	10	10.4	9	10.4	16	46.1	5	5.9	5	6.5	89	203.8
DORCHESTER	2	.3			1	1.0	12	27.3	28	62.7	57	324.9	24	150.5	25	150.5	33	326.5	12	148.1	6	27.0			200	1218.8
EDGEFIELD	1	8.0	1	.1	3	15.1	9	19.7	10	25.6	5	18.2	6	31.1	6	107.0	9	43.1	2	12.0	6	31.0			58	310.9
FAIRFIELD	2	.3	1	.1	5	18.9	10	12.7	10	22.7	13	16.4	5	4.4	14	30.6	8	8.3	12	5.0	4	2.6			84	122.0
FLORENCE	1	.2	1	2.0	2	18.0	9	21.2	21	60.2	64	580.2	8	60.6	38	204.2	40	291.7	42	224.3	15	44.7	5	1.6	246	1508.9
GEORGETOWN	4	3.7					4	3.3	7	12.0	33	228.5	15	27.0	20	112.8	49	442.3	30	157.0	6	11.8	1	.1	169	998.5
GREENVILLE	1	.1					7	16.3	2	1.2	4	6.0	4	15.0	13	29.1	9	67.0	12	54.5	3	4.2	1	.5	56	193.9
GREENWOOD	3	1.7	1	.2	5	2.4	16	22.4	19	63.1	25	50.6	11	34.2	33	105.6	12	20.5	18	22.2	9	17.4	2	2.2	154	342.5
HAMPTON	1	1.0			3	1.2	6	2.4	3	8.8	19	49.6	12	32.6	12	23.9	29	89.9	16	59.8	8	11.0			109	280.2
HORRY					1	.5	4	12.0	12	20.8	48	142.3	13	13.5	14	62.6	40	212.0	28	453.9	6	4.4	1	4.0	167	926.0
JASPER					1	4.0	8	8.6	27	106.7	35	205.4	26	85.9	32	172.8	77	444.7	24	84.9	7	43.9	1	.5	238	1157.4
KERSHAW	10	17.9			4	1.6	13	14.9	18	60.8	15	56.4	9	10.8	23	236.4	32	113.1	20	27.3	6	6.1	1	.3	151	545.6
LANCASTER					3	1.4	4	31.0	13	15.5	22	57.1	8	7.7	21	57.5	15	163.6	14	14.4	2	3.0			102	351.2
LAURENS	6	5.0			2	3.0	17	28.5	23	125.5	12	60.5	7	22.0	23	79.0	15	61.0	15	56.5	10	12.5			130	453.5
LEE			1	.5	6	11.6	11	37.8	14	77.6	36	199.8	13	36.6	32	369.7	23	300.5	29	389.6	7	41.5	1	2.5	173	1467.7
LEXINGTON	3	3.9			6	12.8	36	46.8	50	78.0	36	50.0	35	70.6	51	89.0	49	171.5	47	140.5	17	33.0	4	2.8	334	698.9
LOWER CHAR.					1	.5	4	36.6	8	35.3	25	103.8	11	27.7	9	54.0	23	148.9	11	49.1	4	6.5			96	462.4
MARION	1	.5			1	1.5	2	.4	5	.9	13	36.4			2	29.5	13	18.7	12	26.3	6	3.6			55	117.8
MARLBORO	1	1.0	2	.5			2	2.5	11	55.9	13	22.8	6	17.3	24	102.4	14	32.8	14	90.2	7	14.9	1	2.0	95	342.3
McCORMICK			3	.3	2	.2	10	4.8	18	28.1	10	31.5	4	1.4	6	28.4	5	15.1	6	89.7	8	3.2	1	1.0	73	203.7
NEWBERRY	4	5.5			1	.2	11	10.3	10	22.6	8	11.5	8	2.5	15	56.2	19	20.8	6	7.7	1	.1			83	137.4
OCONEE	1	.1					2	.4	5	10.2	1	1.5	3	33.0	13	21.4	1	.6	10	24.3	2	11.0			38	102.5
ORANGEBURG	3	3.6	2	.6	4	5.0	14	54.8	41	164.6	103	628.4	29	131.4	37	174.9	60	389.7	32	129.8	4	11.4	2	5.6	331	1699.8
PICKENS							5	4.5	7	8.5	7	11.7	2	4.5	4	50.3	5	6.1	9	31.3	2	2.5			41	119.4
RICHLAND	2	3.5					3	12.0	6	19.0	25	148.6	6	41.0	9	66.0	17	84.5	24	114.1	13	150.5	3	9.0	108	648.2
SALUDA	2	.6			1	.1	12	144.0	13	30.4	11	11.2	5	16.5	14	46.4	4	64.0	2	.2	3	12.0	2	6.0	69	331.4
SPARTANBURG	2	3.0			1	1.0	13	28.5	9	81.8	15	32.0	24	122.5	15	64.5	14	62.5	12	97.5	5	12.5			110	505.8
SUMTER	5	7.6			2	21.5	11	82.0	30	162.0	78	617.5	19	108.7	37	251.9	31	302.8	24	186.7	14	62.3	2	17.0	253	1820.0
UNION	4	4.0			4	2.0	7	11.0	15	38.5	6	6.0	12	48.0	12	60.5	9	63.5	5	31.5	3	2.0	2	1.5	79	268.5
UPPER CHAR.	3	21.2					4	20.0	11	237.3	24	197.9	8	46.6	22	313.8	16	427.7	13	287.1	5	43.0			106	1594.6
WILLIAMSBURG	3	9.5			6	9.2	19	64.0	49	208.6	114	1022.1	23	99.6	73	540.1	137	1171.9	85	931.5	13	57.5			522	4114.0
YORK	3	2.2					9	16.5	7	29.0	7	28.3	8	14.9	19	33.2	11	22.8	15	84.7	8	9.5	4	2.6	91	243.7
TOTAL	111	226.1	23	44.3	93	175.3	434	1189.9	749	2697.1	1436	8181.4	640	3313.1	1162	7528.5	1350	10805.9	931	6299.1	332	1194.4	70	179.9	7331	41835.0

**SOUTH CAROLINA FORESTRY COMMISSION
FOREST AND NON-FOREST LAND FIRES BY COUNTY
FISCAL YEAR 92**

COUNTY	TOTAL AREA PROTECTED	FOREST LAND		NON-FOREST LAND		NUMBER OF FIRES	TOTAL ALL LAND		
		NUMBER OF FIRES	AREA BURNED	NUMBER OF FIRES	AREA BURNED		AREA BURNED	% AREA BURNED	AVG. AC. PER FIRE
ABBEVILLE	219,465	47	159.3	71	186.9	118	346.2	.16	2.9
AIKEN	440,546	165	711.3	62	226.4	233	937.7	.21	4.0
ALLENDALE	170,016	19	76.3	11	54.8	32	131.1	.08	4.1
ANDERSON	205,182	62	222.0	22	157.0	86	379.0	.18	4.4
BAMBERG	157,809	49	136.8	14	76.9	65	213.7	.14	3.3
BARNWELL	132,906	42	183.1	30	82.3	72	265.4	.20	3.7
BEAUFORT	150,534	46	213.7	59	191.5	110	405.2	.27	3.7
BERKELEY	393,479	593	6,896.3	20	136.3	619	7,032.6	1.79	11.4
CALHOUN	146,634	33	91.1	16	79.1	49	170.2	.12	3.5
CHEROKEE	165,015	71	225.4	26	102.6	97	328.0	.20	3.4
CHESTER	307,085	48	138.6	81	165.8	130	304.4	.10	2.3
CHESTERFIELD	376,724	119	829.0	60	166.6	180	995.6	.26	5.5
CLARENDON	223,028	254	2,022.9	116	1,117.0	381	3,139.9	1.41	8.2
COLLETON	501,274	267	2,374.1	93	466.4	363	2,840.5	.57	7.8
DARLINGTON	197,151	154	737.3	32	116.9	186	854.2	.43	4.6
DILLON	158,476	80	177.5	9	26.3	89	203.8	.13	2.3
DORCHESTER	294,709	176	1,094.4	21	124.4	200	1,218.8	.41	6.1
EDGEFIELD	227,065	43	189.7	12	121.2	58	310.9	.14	5.4
FAIRFIELD	409,252	42	75.5	40	46.5	84	122.0	.03	1.5
FLORENCE	301,969	214	1,318.9	30	190.0	246	1,508.9	.50	6.1
GEORGETOWN	423,817	158	947.0	9	51.5	169	998.5	.24	5.9
GREENVILLE	311,394	34	129.4	20	64.5	56	193.9	.06	3.5
GREENWOOD	210,955	121	267.0	32	75.5	154	342.5	.16	2.2
HAMPTON	284,647	80	219.3	28	60.9	109	280.2	.10	2.6
HORRY	497,121	160	905.8	6	20.2	167	926.0	.19	5.5
JASPER	331,913	207	1,058.3	25	99.1	238	1,157.4	.35	4.9
KERSHAW	380,314	123	406.5	25	139.1	151	545.6	.14	3.6
LANCASTER	285,320	67	311.1	35	40.1	102	351.2	.12	3.4
LAURENS	315,095	65	268.5	65	185.0	130	453.5	.14	3.5
LEE	131,603	135	1,294.6	33	173.1	173	1,467.7	1.12	8.5
LEXINGTON	271,581	330	693.4	3	5.5	334	698.9	.26	2.1
LOWER CHAR.	173,668	83	399.7	9	62.7	96	462.4	.27	4.8
MARION	226,184	49	110.7	4	7.1	55	117.8	.05	2.1
MARLBORO	188,471	62	231.0	29	111.3	95	342.3	.18	3.6
MCCORMICK	166,791	46	168.8	26	34.9	73	203.7	.12	2.8
NEWBERRY	269,596	52	94.9	30	42.5	83	137.4	.05	1.7
OCONEE	224,876	23	59.9	14	42.6	38	102.5	.05	2.7
ORANGEBURG	402,276	226	1,110.0	95	589.8	331	1,699.8	.42	5.1
PICKENS	238,974	37	91.3	4	28.1	41	119.4	.05	2.9
RICHLAND	303,252	87	538.1	17	110.1	108	648.2	.21	6.0
SALUDA	185,142	31	247.7	35	83.7	69	331.4	.18	4.8
SPARTANBURG	278,233	64	331.4	45	174.4	110	505.8	.18	4.6
SUMTER	254,928	188	1,348.2	60	471.8	253	1,820.0	.71	7.2
UNION	218,161	21	127.5	58	141.0	79	268.5	.12	3.4
UPPER CHAR.	90,769	96	1,567.3	7	27.3	106	1,594.6	1.76	15.0
WILLIAMSBURG	428,121	509	4,017.7	12	96.3	522	4,114.0	.96	7.9
YORK	286,737	41	152.1	48	91.6	91	243.7	.08	2.7
TOTAL	2,558,258	5,619	34,970.4	1,599	6,864.6	7,331	41,835.0	.33	5.7

SOUTH CAROLINA FORESTRY COMMISSION
PROPERTY LOSS REPORT
FROM 07/01/91 THRU 06/30/92

DISTRICT & COUNTY	HOMES		OTHER STRUCT.		EQUIPMENT		VEHICLES		OTHER	
	MEM.	EST. VALUE	MEM.	EST. VALUE	MEM.	EST. VALUE	MEM.	EST. VALUE	MEM.	EST. VALUE
*CAMDEN DISTRICT										
CHESTERFIELD	1	8,000	0	0	0	0	0	0	30	840
KERSHAW	0	0	2	1,600	0	0	3	13,000	4	600
LANCASTER	0	0	0	0	0	0	0	0	0	0
LEE	0	0	0	0	0	0	0	0	0	0
RICHLAND	0	0	0	0	0	0	0	0	0	0
SUMTER	0	0	0	0	0	0	0	0	0	0
DISTRICT TOTAL	1	8,000	2	1,600	0	0	3	13,000	34	1,440
*FLORENCE DISTRICT										
DARLINGTON	0	0	0	0	0	0	0	0	0	0
DILLON	0	0	0	0	0	0	0	0	0	0
FLORENCE	0	0	3	51,500	0	0	0	0	1	0
BORRY	0	0	0	0	0	0	0	0	0	0
MARION	0	0	0	0	0	0	0	0	0	0
MARLBORO	0	0	0	0	0	0	0	0	50	750
DISTRICT TOTAL	0	0	3	51,500	0	0	0	0	51	750
*KINGSTREE DISTRICT										
BERKELEY	6	0	2	3,000	1	10,000	0	0	0	0
CLARENDON	1	12,000	1	0	0	0	0	0	1	1,000
GEORGETOWN	0	0	0	0	0	0	0	0	0	0
WILLIAMSBURG	0	0	1	1,200	0	0	0	0	0	0
UPPER CHARLESTON	0	0	0	0	0	0	0	0	0	0
DISTRICT TOTAL	7	12,000	4	4,200	1	10,000	0	0	1	1,000
*NEWBERRY DISTRICT										
ABBEVILLE	0	0	5	2,350	8	12,000	3	400	12	808
CHESTER	1	30,000	0	0	0	0	0	0	0	0
EDGEFIELD	0	0	2	10,000	0	0	0	0	300	5,600
FAIRFIELD	0	0	1	5,000	0	0	0	0	0	0
GREENWOOD	1	500	6	6,700	1	200	0	0	2	350
LAURENS	0	0	0	0	1	20,000	0	0	0	0
MCCORMICK	0	0	0	0	0	0	0	0	0	0
NEWBERRY	0	0	1	50	0	0	0	0	20	300
SALUDA	0	0	1	7,000	0	0	0	0	0	0
DISTRICT TOTAL	2	30,500	16	31,100	10	32,200	3	400	334	7,058
*ORANGEBURG DISTRICT										
AIKEN	1	500	4	2,500	0	0	1	400	1	500
ALLENDALE	0	0	0	0	0	0	0	0	0	0
BAMBERG	0	0	1	500	0	0	1	5,000	0	0
BARNWELL	0	0	0	0	0	0	0	0	0	0
CALHOUN	0	0	1	1,000	0	0	0	0	0	0
LEXINGTON	1	10,000	6	12,800	0	0	9	25,000	76	8,775
ORANGEBURG	3	39,000	5	9,500	3	12,000	74	11,400	22	2,275
DISTRICT TOTAL	5	49,500	17	26,300	3	12,000	85	41,800	99	11,550
*SPARTANBURG DISTRICT										
ANDERSON	0	0	0	0	0	0	0	0	0	0
CHEROKEE	0	0	0	0	0	0	0	0	0	0
GREENVILLE	0	0	1	5,000	0	0	0	0	0	0
OCONEE	1	40,000	0	0	0	0	0	0	81	97,000
PICKENS	0	0	5	4,000	0	0	1	2,000	1	300
SPARTANBURG	0	0	1	1,000	0	0	0	0	1	1,000
UNION	0	0	0	0	0	0	0	0	0	0
YORK	0	0	1	6,500	1	400	2	850	1	4,050
DISTRICT TOTAL	1	40,000	8	16,500	1	400	3	2,850	84	102,350
*WALTERBORO DISTRICT										
BEAUFORT	1	6,000	0	0	0	0	0	0	0	0
LOWER CHARLESTON	0	0	0	0	0	0	0	0	0	0
COLLETON	3	56,900	5	5,500	2	1,000	0	0	21	120
DORCHESTER	0	0	2	4,000	8	11,000	0	0	1	14,000
HAMPTON	0	0	0	0	1	200	0	0	65	5,400
JASPER	0	0	2	3,000	0	0	0	0	3	1,025
DISTRICT TOTAL	4	62,900	9	12,500	11	12,200	0	0	90	20,545
*MANCHESTER SF										
MANCHESTER SF	0	0	0	0	0	0	0	0	0	0
DISTRICT TOTAL	0	0	0	0	0	0	0	0	0	0
*SAND HILLS SF										
SAND HILLS SF	0	0	0	0	0	0	0	0	0	0
DISTRICT TOTAL	0	0	0	0	0	0	0	0	0	0
STATE TOTAL	20	202,900	59	143,700	26	66,800	94	58,050	693	144,693

1991-92
County Fire Personnel & Volunteers

	Rangers	Wardens	Tower Operators	Totals	Volunteers
Abbeville	1	3	1	5	900
Aiken	1	4	4	9	1312
Allendale	1	2	2	5	6
Anderson	1	2	2	5	474
Bamberg	1	2	2	5	225
Barnwell	1	3	2	6	362
Beaufort	1	4	2	7	445
Berkeley	1	7	5	14	1490
Calhoun	0	3	2	5	111
Charleston	0	3	2	5	883
Cherokee	1	2	1	4	615
Chester	1	2	1	4	1222
Chesterfield	1	4	3	8	1028
Clarendon	1	4	3	8	621
Colleton	1	6	5	12	526
Darlington	1	4	2	7	753
Dillon	1	3	2	6	188
Dorchester	1	5	3	9	316
Edgefield	1	2	1	4	308
Fairfield	1	4	3	8	330
Florence	1	6	3	10	648
Georgetown	1	6	4	11	487
Greenville	1	4	2	7	392
Greenwood	1	2	2	6	654
Hampton	1	3	3	7	175
Horry	1	6	4	11	455
Jasper	1	5	2	8	452
Kershaw	1	5	4	10	140
Lancaster	1	4	1	6	693
Laurens	1	2	1	4	581
Lee	1	3	2	6	193
Lexington	1	5	3	9	1693
Marion	1	4	3	8	221
Marlboro	1	3	3	7	443
McCormick	1	2	1	4	162
Newberry	1	3	1	5	730
Oconee	1	2	1	5	184
Orangeburg	1	7	4	12	381
Pickens	1	3	1	5	153
Richland	1	5	3	9	450
Saluda	1	1	1	3	332
Spartanburg	1	4	2	7	1103
Sumter	1	5	3	9	745
Union	1	2	1	4	566
Williamsburg	1	5	4	10	539
York	1	2	1	4	850
Total	44	168	108	323	25385

Percent Of Fires By Cause Five Year Period

Cause	1987-88	1988-89	1989-90	1990-91	1991-92
Lightning	2.5	2.3	1.5	4.9	0.8
Campfire	0.4	0.5	0.4	0.5	0.6
Smoking	5.5	3.9	5.1	4.9	4.1
Debris Burning	28.9	30.7	33.4	25.4	31.4
Incendiary	45.1	46.9	41.8	45.2	46.5
Equipment Use	4.9	4.3	5.1	5.5	5.1
Railroad	2.5	1.9	1.7	1	0.9
Children	4.5	4.6	4.2	4.6	4.1
Miscellaneous	5.7	4.9	6.8	7.9	6.5

Total All Land Fires By Cause

Fiscal Year 1991-92

Causes	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
Lightning	56	0.76	417.7	7.5
Campfire	42	0.57	422.7	10.1
Smoking	303	4.13	999.6	3.3
Debris Burning	2305	31.44	12473.1	5.4
Incendiary	3410	46.51	23187.4	6.8
Equipment Use	373	5.09	1395	3.7
Railroad	66	0.9	239.3	3.6
Children	301	4.11	862.7	2.9
Miscellaneous	475	6.48	1837.4	3.9
Totals	7331	100	41835	5.7

Five Year Summary Fire Statistics

Fiscal Year	Total Area Protected	Forest Land		Non Forest Land		All Lands		Average Acres Per Fire	% Area Burned
		Number Forest Land Fires	Forest Land Burned	Number Non Forest Land Fires	Acres Non Forest Land Burned	Total No. All Land Fires	Total Acres		
1987-88	12558258	7078	35344.7	1388	7269.4	8466	42614.4	5.0	0.28
1988-89	12558258	4990	24950.0	860	4142.2	5850	29092.2	5.0	0.23
1989-90	12558258	3786	16430.6	995	4046.0	4861	20476.6	4.2	0.16
1990-91	12558258	3660	27337.1	669	3198.6	4329	30535.7	7.1	0.24
1991-92	12558258	5619	34970.4	1599	6864.6	7331	41835.0	5.7	0.33
Five Year Average		5027	27806.6	1102	5104.2	6167	32910.8	5.3	0.26

NOTE: 10% was added to Total Area Protected in 1987-88 to cover Non-Forest Lands Protected

**South Carolina Forestry Commission
COUNTY SUPPRESSION PERSONNEL
FISCAL YEAR '92**

COUNTY	SCFC PERSONNEL	OTHER PERSONNEL	TOTAL PERSONNEL
ABBEVILLE	198	900	1,098
AIKEN	417	1,312	1,729
ALLENDALE	59	6	65
ANDERSON	166	474	640
BAMBERG	90	225	315
BARNWELL	116	362	478
BEAUFORT	145	445	590
BERKELEY	1,213	1,490	2,703
CALHOUN	87	111	198
CHEROKEE	181	615	796
CHESTER	319	1,222	1,541
CHESTERFIELD	300	1,028	1,328
CLARENDON	814	621	1,435
COLLETON	580	526	1,106
DARLINGTON	292	753	1,045
DILLON	131	188	319
DORCHESTER	285	316	601
EDGEFIELD	108	308	416
FAIRFIELD	128	330	458
FLORENCE	406	648	1,054
GEORGETOWN	272	487	759
GREENVILLE	98	392	490
GREENWOOD	267	654	921
HAMPTON	137	175	312
HORRY	230	455	685
JASPER	327	452	779
KERSHAW	480	140	620
LANCASTER	154	693	847
LAURENS	209	430	639
LEE	256	193	449
LEXINGTON	448	1,693	2,141
LOWER CHARLESTON	116	344	460
MARION	91	221	312
MARLBORO	167	443	610
MCCORMICK	111	162	273
NEWBERRY	133	730	863
OCONEE	72	184	256
ORANGEBURG	416	381	797
PICKENS	74	153	227
RICHLAND	137	450	587
SALUDA	95	332	427
SPARTANBURG	181	1,103	1,284
SUMTER	474	745	1,219
UNION	162	566	728
UPPER CHARLESTON	240	539	779
WILLIAMSBURG	719	538	1,257
YORK	149	850	999
TOTAL	12,250	25,385	37,635

INFORMATION AND EDUCATION SECTION

The Information and Education Section is responsible for the production and dissemination of forestry information to the public and for assisting employees with their work in Environmental Education, Forest Fire Prevention and Urban Forestry.

URBAN FORESTRY

Urban forestry seeks to improve the quality of life in populated areas through the wise management of the urban tree resources. Clean air, clean water, aesthetic value, increased property value, noise buffering, energy conservation, and public safety are the products of this endeavor.

The Information and Education Section is responsible for the planning and efficient operation of the Commission's urban forestry technical assistance program.

America The Beautiful

America the Beautiful is a national urban and community forestry grants program funded by Congress through the U.S. Forest Service. South Carolina received \$150,000 base funding for technical assistance and \$190,000 of pass-through grant funding for county and local governments, non-profit organizations, and educational institutions.

The following applicants were funded under the America the Beautiful program in 1992:

<u>Applicant</u>	<u>Project Type</u>
1. City of Aiken	Street Tree Inventory
2. City of Anderson	Street Planting Analysis
3. Camden Tree Foundation	Tree Planting
4. City of Cayce	Master Planting Plan
5. City of Charleston	Street Tree Inventory
6. City of Chester	Demonstration Tree Planting
7. Chester County	Gateway Tree Planting
8. City of Clemson	Community Tree Plan
9. Clemson Forestry Extension	Education & Demonstration Sites
10. Columbia Green	Street Tree Planting
11. City of Denmark	Demonstration Tree Planting
12. City of Florence	Airport Gateway Planting
13. City of Folly Beach	Tree Planting Plan
14. City of Gaffney	Street Tree Inventory
15. City of Georgetown	Master Tree Plan
16. City of Goose Creek	Tree Planting Plan/Tree Trust Pub.
17. City of Lancaster	Master Tree Plan

18. Town of Latta	Inventory/Plan/Demonstration Pruning
19. Lowcountry Releaf	Non-profit Staffing
20. City of North Charleston	Master Tree Planting Plan
21. City of Orangeburg	Master Tree Planting Plan
22. Pickens County	Office Bldg Demonstration Planting
23. City of Rock Hill	Tree Planting and Maintenance Guide
24. City of Spartanburg	Staff person in urban forestry office
25. Spartanburg County	Demonstration Planting
26. Town of Sullivan's Island	Tree Inventory
27. City of Union	Master Tree Plan
28. Union County	Gateway Tree Planting
29. York Technical College	Demonstration Tree Planting
30. Town of Latta	Public Tree Ordinance

Small Business Tree Planting Program

The Forestry Commission funded 49 tree planting projects under the Small Business Administration Tree Planting Program Grant for 1991. Nineteen of these were completed during the year. This resulted in 1,178 trees planted in 16 counties.

SBA TREE PROJECTS COMPLETED:

	<u>No.</u>	<u>No. Trees Planted</u>
Schools	6	410
Towns	10	656
State Agencies	3	112

Tree City USA

Sponsored by the National Arbor Day Foundation, TREE CITY USA is administered in South Carolina by the Forestry Commission.

The program seeks to stimulate and promote the management of urban trees by recognizing towns and cities which meet the following criteria: (1) expenditure of at least two dollars per capita on tree care and planting, (2) establishment of a city tree ordinance and (3) a legally constituted Tree Board, and (4) observance of Arbor Day by a mayor's proclamation and official ceremony.

South Carolina ranks 24th nationally with 20 towns recognized as TREE CITY USA:

Aiken	Hartsville
Camden	Iva
Charleston	Lancaster
Cheraw	Lexington
Columbia	Mount Pleasant
Conway	Pelion
Florence	Rock Hill
Fountain Inn	Spartanburg
Greenville	Summerville
Tega Cay	Winnsboro

Arbor Day/Gold Leaf Award

The Forestry Commission and Clemson Extension Service cooperated in publicizing Arbor Day in South Carolina which falls on the first Friday in December. The International Society of Arboriculture's Gold Leaf Award was presented to the Kingsbury Elementary School in Sumter County for the best school program and to Greenwood County Beautification Commission for the best civic program.

Technical Assistance

Two full-time urban foresters are employed by the Forestry Commission, one in Columbia and one in Charleston. Other Commission project foresters provide urban forestry assistance in their respective areas on a time-available basis. A full-time Community Action Forester works in the Columbia Office along with an Urban Forestry Coordinator for statewide programs.

<u>URBAN TECHNICAL ASSISTANCE</u>		
Types of Technical Assistance	Non-Grant Through Forestry Commission T.A.	Grant Program Accomplishments by Grantee (ATB)
Program Development/Expansion	79	NA
Project Management	84	NA
Urban Forest Cultural Practices	1,764	NA
<u>TREES INVENTORIED</u>		
Miles	1	730
Total Trees Inventoried	3,126	44,094
<u>TREES PLANTED</u>		
Seedlings/Whips/Saplings (#)	14,343	32
Street/Park Size (#)	1,396	973
<u>TREES MAINTAINED (#)</u>	1,891	1,184
<u>TREES PROTECTED</u>		
Local Ordinances Passed/Revised (#)	4	0
<u>DEMONSTRATION PLANTING PROJECTS (#)</u>		
	83	33

Fire Prevention

Through May, 1992, statewide fire prevention efforts were coordinated through the I & E Section. This function has since been transferred to the Fire Management Staff.

Take Five, the FEMA-funded fire prevention campaign for the Hugo area, was continued through the fiscal year. The family education program begun under last year's **Take Five** added 1,200 new Ranger Cadet participants, bringing the total to over 3,700. Of these, more than 36% have completed the program.

A new publication, **Take Five—A Guide to Safe Burning**, was produced as a direct mail piece to all persons who contacted the Forestry Commission about any type of outdoor burning. Mailing was handled by towers or county offices receiving burning notifications.

Three new TV spots and 12 radio spots were produced to support the **Take Five** message. Air time was purchased for these throughout the fire season. In addition, the Fire Danger Index was aired once per week on TV nightly news in three major markets in the Hugo area. The South Carolina Network aired the Index daily on about twenty radio stations during the same period.

Fire prevention activities not related to the FEMA campaign included issuing 17 fire-related media advisories and one feature story. Procedures for implementation of the Red Flag Fire Alert were updated, and all news directors and newspaper editors were sent explanations of this program. The Forestry Commission also assisted the Mississippi Forestry Commission with development of their Red Flag program.

The Fire Prevention Forester chaired the Fire Prevention Committee of the newly-formed Wildland Fire Protection Partnership and developed the organization logo. He also produced a guide to effective Smokey Bear programs and initiated restoration of all Smokey costumes owned by the Forestry Commission.

Fire prevention exhibits were produced for display at two area functions. Posters, pencils and rulers with a fire prevention message were distributed to schools across the state in conjunction with local fire prevention activities.

Forest Science Curriculum Project

Initiated in the fall of 1991, this project seeks to provide a series of forest science lessons for grades 6, 7, and 8. The material is designed for use as an alternate unit in the regular science curriculum; individual lessons may also be used as supplements to existing textbook material.

A curriculum overview was developed with assistance from the Science Department of J. B. Beck Middle School in Georgetown County; from this, teacher's guides are being written and produced for each grade level.

The sixth grade teacher's guide was produced during the fiscal year and underwent pilot implementation by the science staff at Beck Middle School. This material is now available on request to sixth grade science departments statewide.

Woodworking Shop/Warehouse

Through this facility, a single Master Craftsman supports statewide I & E by providing signage, cabinetry, and exhibit construction. He is also responsible for receiving, warehousing, and distributing much of the agency's printed material.

Accomplishments this year include: construction of 37 outdoor signs for Forestry Commission facilities and six pieces of custom office furniture; design and construction of a porch for detached offices at the Columbia complex; development and construction of a specialized workroom at the Central Repair Shop; construction of one protective shelter for outdoor weather instruments; and woodworking assistance with several exhibits. Six hundred wooden nametags were prepared for various functions, and several custom map frames were built for fire control installations.

The Master Craftsman was instrumental in developing techniques for restoration of Smokey Bear costumes, a project that will be ongoing through the next fiscal year.

Project Learning Tree

An internationally recognized environmental education program, Project Learning Tree is supported in South Carolina by a steering committee composed of forestry and education professionals, and administered by the Forestry Commission. In 1991, South Carolina PLT facilitators trained over 1,000 teachers and other educators, making us one of the top ten states in the nation in number of educators trained to use PLT activities.

Quarterly Newsletter

Four issues were printed. Distribution includes all Forestry Commission personnel and retirees, County Forestry Board members, other state forestry departments, other SC state agencies, U.S.D.A. Forest Service offices in Columbia, Atlanta and Washington, and others. Tree Country: SC was used to get Forestry Commission reorganization information to all field personnel.

Video

In addition to FEMA-funded fire prevention television material, a program introducing the Forest Stewardship Program was produced showcasing the forestry practices of South Carolina landowner Yancey McLeod. The video was used in Stewardship training sessions, at the SC State Fair, and as a part of other programs and exhibits.

Stewardship Forest Campaign

The Information and Education Section, in cooperation with Forest Management Section and an advertising agency developed an advertising campaign for the new Forest Stewardship Program. An 8'x20' exhibit was produced including a large photograph of a healthy forest and bearing the new Stewardship slogan, "It's the Least You Can Do and the Most You Can Do!". Brochures, a poster, bumper stickers, lapel stickers, ten second and thirty second radio spots, magazine ads and a slide/tape program were also produced to promote forest stewardship. The exhibit was displayed at the State Fair, the Coastal Carolina Fair, the Wildlife Expo, the Waccamaw Deer Classic and nine other events. Over a million people were exposed to information about the program.

Exhibits

Seven additional exhibits, on subjects ranging from urban forestry to fire protection, were produced for use by field personnel in local fairs.

Publications

Print material produced by the I&E Section includes: two Centennial Forestry Fact Sheets for the Society of American Foresters; a FAX letterhead for the Commission; redesigned nametags; reprints of the cost-share brochure, "Tree Care Book", and "Familiar Trees of South Carolina"; a brochure, membership application, and banner for the urban forestry program; and a draft of the revised Best Management Practices manual.

Slide Programs

A slide program depicting the sampling and testing of streams for water quality was produced for use by the Commission's forest hydrologist.

Graphic Design and Photography

Other graphic design and photographic assistance was given to RC&D, the Clarendon County Forestry Association, the Greenwood Woodland Clinic, Tree City USA, the South Carolina Forestry Association, and the Forest Stewardship program.

INFORMATION AND EDUCATION SUMMARY

District	General		School		Fire No.	Prev. Attend	Arbor Day		Workshop	
	No.	Attend	No.	Attend			No.	Attend	No.	Attend
Camden	26	907	99	5,503	40	3,280	18	1,840	16	647
Florence	18	734	30	956	42	1,223	9	280	5	114
Kingstree	13	7,227	18	1,580	9	8,451	6	1,470	6	120
Newberry	43	9,866	83	10,154	40	2,118	15	1,472	29	1,675
Orangeburg	27	2,943	68	6,567	97	9,223	33	13,189	8	181
Spartanburg	45	3,806	184	13,192	102	15,671	5	675	49	1,934
Walterboro	17	710	38	2,536	68	5,179	12	445	4	95
Total Districts	189	26,193	520	41,188	398	45,145	98	19,371	117	4,766
State Forests	60					2,825				
Nurseries										
Columbia	88	3,528	25	976	9	587	3	300	80	3,717
Grand Totals	337	32,546	545	42,164	407	45,732	101	19,671	197	8,483

	TV	Print	Radio	Exhibits	Parades
Camden	3	14	2	8	12
Florence	12	21	5	2	7
Kingstree	10	45	22	4	6
Newberry	3	103	12	25	15
Orangeburg	5	46	17	5	15
Spartanburg	38	96	115	6	7
Walterboro	15	30	25	20	12
Total Districts	86	355	198	70	74
State Forests					
Nurseries					
Columbia	157	207	148	27	
Grand Total	243	567	346	97	74

INFORMATION AND EDUCATION ACTIVITIES FIVE YEAR SUMMARY

YEAR	NUMBER OF PROGRAMS	ATTENDANCE CONTACTS	MEDIA EXHIBITS	PARADE
87-88	902	63,826	843	161
88-89	1,053	62,432	914	154
89-90	1,283	106,201	1,330	195
90-91	1,255	101,183	1,339	186
91-92	1,587	148,596	1,156	171

STATE FORESTS

There are four state forests operated by the Forestry Commission: Cassatt, Harbison, Manchester and Sand Hills.

CASSATT STATE FOREST

Cassatt State Forest is now operated as a compartment of Sand Hills State Forest. Cassatt State Forest, with 462 acres, is located about two miles north of Cassatt, S.C. in Kershaw County.

Payment to Counties

Twenty five percent of the gross receipts of all state forest operations is paid to the county in which the forest is located. Fiscal year '91-92 payments to counties are as follows:

Chesterfield (Sand Hills State Forest) \$109,610.21
Darlington (Sand Hills State Forest) \$2,695.33
Sumter (Manchester State Forest) \$51,268.92

MANCHESTER STATE FOREST

Manchester State Forest, located south of Wedgefield in Sumter County, contains 28,830 acres. From 1939 to 1955, this land was leased by the Forestry Commission from the federal government. The state received title to this property on June 28, 1955.

Receipts

RECEIPTS FOR OPERATING BUDGET

PINE STRAW	\$ 6,552.57
TIMBER SALES 241,674 BD. FT., 3,361 CDS.	109,724.54
WILDLIFE	1,555.00
AGRICULTURAL LAND RENT AND LEASES	113,340.00
TOTAL	\$231,172.11

Timber sales efforts continued to be devoted to harvesting timber adversely effected by Hurricane Hugo: harvesting remaining scattered timber from understocked areas and selectively thinning damaged timber from other areas.

The continuous forest inventory plots established and measured in 1989 were remeasured during the 91-92 winter to obtain a more definitive estimate of the damage caused by Hurricane Hugo. Initial information from the remeasurement

indicates that the softwood inventory decreased from 22.3 million cubic feet to 14.9 million cubic feet.

Pine straw sales were conducted in areas requiring clean up to improve the quality of straw following Hugo salvage thinnings. One hundred sixty-four acres, to be utilized as pine straw production areas, were spot treated with herbicide for hardwood control. One hundred ten free use permits were issued to homeowners to rake pine straw for personal use.

Silvicultural Practices

Three hundred seven acres were prepared for reforestation: 116 acres were prepared by aerial herbicide application; 161 acres were drum chopped; 30 acres K-G'd for natural regeneration. The aerial herbicide and K-G were performed by contractors. A total of 93 acres were planted, including 30 acres of spot planting to improve stocking on a site planned for natural regeneration. Private vendors planted 78 of the total acres.

The following species and number of trees where planted:

Improved Coastal Loblolly	30,000
Containerized Loblolly	20,000
Total trees planted	50,000

Forest Protection

Seventeen forest fires occurred during the year burning a total of 21 acres. Firebreaks were maintained in high value and high hazard areas. Periodic checks were made for insect and disease damage. Research in cooperation with the Southeastern Forest Experiment Station and the Insect and Disease Section of the Forestry Commission is being conducted on insect and disease prevention.

Five cases for violations of forest regulations were prosecuted; fines totaled \$606.75.

Recreation / Education

Recreation other than hunting and fishing includes rifle/pistol range and mountain bike, motorcycle, and horseback riding. A total of 18 organized group activities were held on the forest involving an estimated 1,500 people.

The rifle/pistol range is operated by a corps of volunteers. A total of 400 annual

free use permits were issued.

Twelve educational programs were conducted on the forest for approximately 260 people.

Wildlife Management

Approximately 20,000 acres of the forest were included in the Wildlife Management Area Program in 1991 through a cooperative agreement between the Forestry Commission and Wildlife and Marine Resources Department.

An intensified program of wildlife management was conducted, with the Wildlife Department providing assistance in wildlife management and law enforcement. Seed, fertilizer and manpower were provided to assist in implementing management practices.

Agricultural lands formerly rented to local farmers were included in areas to be planted and maintained for wildlife habitat.

Planting and/or maintenance was carried out on 95 wildlife plots containing 305 acres.

Shaw Air Force Lease

The U. S. Air Force leases 7,996 acres of the forest for an aerial gunnery range to train pilots from various Air Force bases in the southeastern United States. The South Carolina Air National Guard has access to the range and uses it frequently.

SAND HILLS STATE FOREST

Sand Hills State Forest, located in Chesterfield and Darlington Counties, contains 46,000 acres. Leased from the federal government in 1939, title to the forest was transferred to the Forestry Commission in 1992.

Silvicultural Practices

Trees were planted in fields and on lands that were harvest-cut and site prepared. A total of 510 acres were planted with longleaf pine and 8 acres were planted with loblolly pine.

Prescribed burning was done on approximately 9,820 acres. Compartment 13 had 1,520 acres. Compartment 18 had 3,410 acres. Compartment 20 had 2,340 acres, and Compartment 21 had 2,550 acres. The South Carolina Forestry Commission also burned 5,000 acres on the Sand Hills National Wildlife Refuge as per a 5 year agree-

ment with the Department of Interior upon receipt of title to the Sand Hills State Forest.

Forest Fire Protection

Nine (9) wildfires occurred on the forest burning a total of 39.4 acres for an average of 4.38 acres per fire.

Recreation

Groups and individuals are encouraged to continue to use the State Forest.

Wildlife Management

In July, the State Forest went under the South Carolina Wildlife Management Area system. All WMA rules and regulations apply on the State Forest.

A furbearer survey was established. A route was established for the survey of red and grey fox, raccoon and rabbit.

The established route for quail survey was taken again this year. Quail Unlimited of Chesterfield County helped improve the food supply of this important game bird by providing seed, lime and fertilizer for use on the forest.

Wood duck nesting boxes were checked and maintained. Twenty-three new boxes were added this year.

Peas, chufas, sorghum, buckwheat, rye and bicolor lespedeza was planted to supplement natural foods for all small game species, deer and turkey to help increase populations.

Farm Land Rentals

Eleven (11) farmland contracts covering 668 acres were renewed. All of these are planted to corn, beans, grain or one of the lespedezas. These plantings should benefit the wildlife program.

Forest Research and Demonstration

The longleaf pine regeneration study continues under the supervision of the U. S. Forest Service.

A demonstration site comparing different site preparation methods was established.

A comparison study of longleaf pine and improved loblolly pine on a good old field site was established.

Red-Cockaded Woodpecker

Management work was done in Compartments 13, 18 and 21. Scrub oak encroachment is a major factor for RCW habitat loss. All scrub oaks and other under brush were chopped down within a one hundred foot radius of each RCW nest tree.

Restrictor plates were installed on many cavities to deter enlargement by other woodpecker species.

The majority of this work was done with the cooperation of the Non-Game section of the South Carolina Wildlife and Marine Resources Department.

Information and Education

Information is available at the Forest Headquarters and local game check stations describing hunting, fishing and other activities. Public contact is made during routine field checks.

Information has been posted at Sugarloaf concerning new rules and regulations.

Pond Management

Lee pond was drained due to problems in the standpipe. Repairs were made and the pond was allowed to refill. Channel catfish, bream and bass were stocked.

Darlington and Scott ponds were opened to fishing after being restocked.

Middendorf and Lee ponds were treated with Diquat for weed control.

Weed control herbicide was applied around boat ramps at all ponds.

A balance check on Mountain Pond showed an imbalance in the fish population. State fisheries biologists recommended draining and restocking to establish a balanced fish population.

Road Maintenance

Because of pine straw theft and garbage dumping, the process of closing all unnecessary roads was continued. Closed roads will be planted in grass. Roads left open are being reworked to provide better water handling.

RECEIPTS

PINE

519,272 bd. ft. sawtimber
11,548 cords

\$479,900.00

HARDWOOD

17,073 bd. ft.
1,668 cords

\$24,109.00

Pine Straw

\$84,273.00

Land Rentals

\$7,777.00

Hunting and fishing

\$2,836.00

Miscellaneous

\$15.00

Stumps (1,021 tons)

\$5,617.00

TOTAL

\$604,527.00

HARBISON STATE FOREST

Harbison State Forest, located northwest of Columbia in Richland County, contains 2,188 acres. The tract is being developed as a public greenspace, emphasizing environmental education and demonstrating forest management practices.

Construction Projects:

The staff constructed a meeting shelter gazebo in the arboretum. Road construction was accomplished in the picnic area and the stewardship area. Four miles of trails and five trail bridges were constructed.

Educational Activities:

School and scout programs were presented to 25 groups with an estimated attendance of approximately 2000. Harbison was the host for a 3-day Boy Scout camporee with approximately 500 scouts and parents participating. Seventeen trees were planted in the arboretum; the trees were acquired through a memorial tree program and a grant from America the Beautiful program. Two Eagle Boy Scout projects were completed. An Explorer Post was established with twenty high school students participating.

Silvicultural Practices:

One timber sale was conducted; a salvage of beetle killed pine produced 236 cords, for \$6,096.08. Five acres were prescribed burned.

Harbison had two wildfires during the year, burning approximately 10 acres, but no damage was incurred.

STATE LANDS MANAGEMENT PROGRAM

The state lands forest management program was created to provide professional forest management assistance to South Carolina state agencies that own timberlands.

During fiscal year 1991-92, five agencies requested assistance from the state lands forester on the following facilities:

- Department of Wildlife and Marine Resource

- Webb Wildlife Center
- Santee Coastal Reserve
- Tillman Sand Ridge Heritage Trust
- Colleton Cowbane Heritage Trust
- Victoria Bluff Heritage Trust
- Salvage Bay Heritage Trust
- Lewis Ocean Bay Heritage Trust
- John de la Howe School

- Department of Parks, Recreation, and Tourism

- Givhans Ferry State Park
- Hunting Island State Park
- Hampton Plantation State Park
- Huntington Beach State Park
- Lake Warren State Park

- Budget and Control Board

- General Services
- South Carolina State College
- Camp Harry Daniels

Forest Products Sales

Three state owned tracts were marked for timber sales. The volume marked was 357,915 board feet and 1,032 cords of pine timber which generated \$67,502.00 in revenue for the owning agencies.

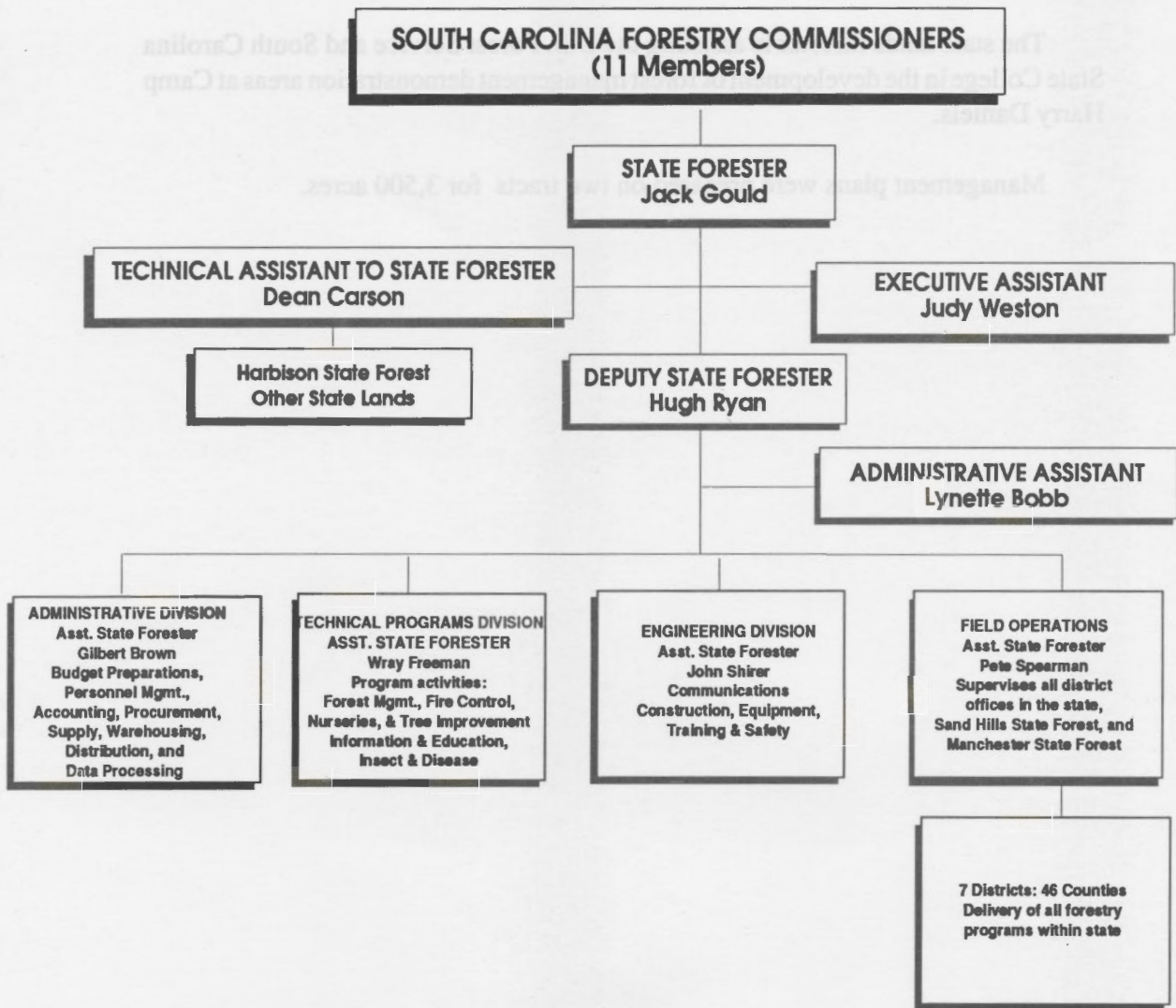
Silvicultural Practices

Pine seedlings were planted on two tracts managed for South Carolina Wildlife and Marine Resources; Webb Wildlife Center and Santee Coastal Reserve. Approximately 35 acres were planted or naturally seeded.

Miscellaneous Requests

The state lands forester is assisting the U.S. Forest Service and South Carolina State College in the development of forest management demonstration areas at Camp Harry Daniels.

South Carolina Forestry Commission Organizational Chart



Total Number of Documents Printed	<u>455</u>
Cost Per Unit	<u>\$ 2.42</u>
Printing Cost - S.C. State Budget & Control Board (up to 255 copies)	<u>\$ 630.00</u>
Printing Cost - Individual Agency (requesting over 255 copies and/or halftones)	<u>\$ 470.40</u>
Total Printing Cost	<u>\$ 1100.40</u>